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A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION I--ETC(U)  
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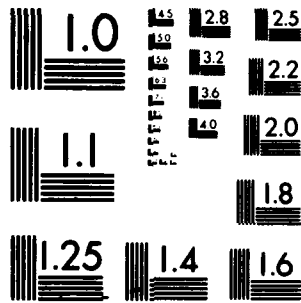
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LEVEL II

A STUDY OF TIME CONSTRAINTS RELATED  
TO FACILITIES ACQUISITION IN  
SUPPORT OF NEW WEAPONS SYSTEMS  
INITIAL BEDDOWNS

Kevin P. Hansen, Captain, USAF

LSSR 57-81

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This research effort investigated the interrelationships between the weapons system acquisition process and the facilities acquisition process. Independent PERT networks were developed for each acquisition process and a probability distribution was determined for each process. Comparison of the probability distributions showed that the facilities acquisition process could be expected to take approximately 13 months longer to reach an initial operational capability than the weapons system acquisition process when both are measured from the start of full-scale development for the weapons system being supported. The two independent PERT networks were then integrated into a single network which was analyzed to determine ways to compress the facilities acquisition process to meet the same initial operational capability as the weapons system acquisition process. Various alternatives to allow compression of the facilities acquisition process were examined, and a proposal to restructure the interface activity "tie-in" points between the two acquisition process was developed. ✓

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A STUDY OF TIME CONSTRAINTS RELATED TO  
FACILITIES ACQUISITION IN SUPPORT OF  
NEW WEAPONS SYSTEMS INITIAL BEDDOWNS

A Thesis

Presented to the Faculty of the School of Systems and Logistics  
of the Air Force Institute of Technology  
Air University

In Partial Fulfillment of the Requirement for the  
Degree of Master of Science in Engineering Management

By

Kevin P. Hansen, BS  
Captain, USAF

September 1981

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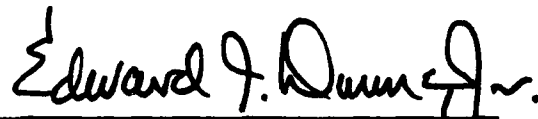
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of the requirements for the degree of

MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

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## CHAPTER 1

### INTRODUCTION

Weapons system development and acquisition in the United States has undergone many different strategies throughout the years, but it wasn't until David Packard became Deputy Secretary of Defense that what might be called a balanced approach involving the Office of the Secretary of Defense (OSD) and the individual services evolved for weapons system development and procurement (20:4). The Packard legacy involves services' control of individual systems development, while OSD maintains overall control by reviewing and controlling further developments of individual weapons systems at specific phase points.

Another legacy of the Packard era is the increased use of hardware prototyping in weapons system development. Prototyping fell into disuse during the McNamara years in favor of total package procurement (TPP), wherein engineering studies and systems analyses were used to evaluate weapons system proposals and to award production contracts based on these paper studies. The TPP concept has evolved in an effort to reduce the costs and time for development of new weapons systems as a result of the rapidly escalating costs associated with these systems. It was thought that this "would allow the government greater cost control during all phases with a minimum of



government examination of the contractor's cost data [20:3]."

The Packard philosophy of a return to prototyping overturned the TPP concept in favor of hardware prototyping so that actual hardware could be evaluated. Prototyping offered several advantages over TPP, including "providing a hedge against strategic uncertainty, . . . a hedge against technological uncertainty, . . . and a hedge against cost uncertainty [16:15-16]." In the words of former Secretary of the Air Force, John L. McLucas:

Although prototypes are costly, looking back at previous programs one can see instances where the total cost could have been less had prototypes been used. Essentially, a prototype is insurance. It insures us that our ideas will work, and that we will not be forced to make major changes late in the development or during production when costs for changes are high. Prototyping is investment in knowledge. We believe that the cost of acquiring that knowledge is frequently more than offset by the consequent reduction of later risks [16:17].

Still another advantage of prototyping is that competition can be maintained for longer periods in the acquisition cycle, which encourages higher quality products. Additionally, there is a much better data base for a development decision if the design approaches are translated into hardware (8:32).

Despite these advantages, there are some disadvantages attributed to using prototype development, the same disadvantages that lead to the introduction of the TPP strategy for systems acquisitions. These disadvantages can be consolidated into two main areas: increased cost and a longer development time. But a 1963 Rand report found no statistical support

that development programs involving large initial commitments cost less than prototype programs, nor was there statistical support for the claim that prototyping increased development time (12:v). The conclusions found in the 1963 Rand report were further confirmed with a 1980 Rand report that reexamined the same problem (20).

The changes in acquisition management fostered by Mr. Packard were incorporated into DoD Directive 5000.1, Major System Acquisitions, which was first issued in 1971. In 1976, the Office of Federal Procurement Policy issued Circular A-109, establishing a federal policy for acquisition. (Circular A 109 is now issued by OMB.) Circular A-109 requires that:

Development of a single system design concept that has not been competitively selected should be considered only if justified by factors such as urgency of need or by the physical and financial impracticality of demonstrating alternatives [27:10].

This requirement for competition stipulated by Circular A-109 has been fully recognized in a revised DoD Directive 5000.1.

But while the framework for weapons systems acquisitions has now been standardized, considerable latitude is given in how particular programs are managed. It can be safely stated that no two system acquisition programs are alike (8:6), and that change is the only constant in a system development. These changes occur both philosophically, such as in the acquisition strategies to be used, and technologically, such as when new requirements or processes for manufacture emerge.

As regards the philosophical changes:

Constant changes in acquisition strategy have been made in an attempt to eliminate the problems of a previous strategy; e.g., fly-before-buy, total package procurement, two-step procurement, and life cycle cost/design to cost have all been used over the past 20 years as acquisition strategies. . . [13:3].

Technological changes, as used herein, refer not only to hardware changes, but also to factors that influence these hardware changes for a given weapons system. Although the following quote may be somewhat exaggerated, it does illustrate the pervasive nature of technological change in a weapons system development.

. . . the operational requirements for defense systems may change one or more times a year. After each change, Government and industry managers must prepare new plans, new schedules, and new budgets. This process occurs repeatedly during the validation stage of an acquisition program and throughout the remainder of the life of the program [10:106].

The dynamic, continually changing environment of major systems acquisitions also impacts on support functions that must concurrently develop, acquire, and deploy support equipment and facilities required by the weapons system. In the area of facilities support, for instance, changes concerning weapons system acquisition strategies can affect facility development schedules and acquisition timetables. Technical changes, on the other hand, can alter facility designs or construction methods, and also impact on schedules and integration requirements.

When a competitive prototyping acquisition strategy is employed for a weapons system, additional problems of safeguarding contractor sensitive information in a manner so as

to not "favor one of the contractors and to avoid technical transfusion between competing proposals [2:185]" must also be solved. Additionally, initial designs and development work for facilities and support equipment may have to be duplicated until the competitive prototype phase is complete and a final choice is made about further development of a single system.

The resolution of problems created by such a dynamic philosophical and technical environment is further exacerbated by the different developmental tracks that weapons systems hardware and facilities follow. The weapons system, for instance, is managed by a single program manager (PM) and the system program office (SPO) to establish a single point of contact for all engineering, financial, and managerial direction required by the weapons system contractor. Also, all funding is obtained through the annual military appropriations bills in the categories of research and development and procurement.

The facilities acquisition process, on the other hand, is initiated by the base at which the facility is to be built, can be designed by in-service or contract personnel, can be managed during construction by the Air Force, the Army Corps of Engineers, or the Navy Facilities Engineering Command (depending on the location and urgency), is financially administered by an Air Force Regional Civil Engineer (AFRCE), is built by a local area building contractor, and accepted by the host base civil engineering organization, the AFRCE,

and the MAJCOM. Funding for facilities support is obtained through the Military Construction Appropriation from Congress, which is a separate appropriation and follows a slightly different budget cycle than other general fund appropriations (26:66).

#### Statement of Problem

In order to achieve a common initial operational capability (IOC) date, all of the aforementioned problems must be dealt with and solved for the concurrent development and acquisition of both the weapons system hardware and the support facilities. But the interface points between the weapons system acquisition process and the facilities acquisition process do not seem to be well understood by all affected parties, nor is their impact on system timetables and schedules fully determined.

This research effort, then, will explore the interface points between the weapons system acquisition process and the facilities acquisition process, when both developmental processes have the same IOC constraint at the first base to operationally deploy the new weapons system and the weapons system is acquired under the competitive flyoff strategy.

While it is impossible to adequately address every facet of the management problems inherent in the acquisition of facilities to support new weapons system beddowns, the intent of this study is to test the hypothesis that the

procedural requirements of the formal military construction program (MCP) are not responsive to time constraints necessary for the acquisition of new or remodeled facilities required to support the initial beddown of new weapons systems acquired under the fly-before-buy/competitive flyoff strategy.

A definitive acceptance of this hypothesis could lead to different procedures for developing and acquiring support facilities for new weapons system beddowns, and can more accurately focus management attention on those particular areas where procedural changes would be most effective.

#### Research Objectives

In order to test the hypothesis stated above, the primary objective of this research is to develop a PERT/time network for the integrated weapons system/facilities acquisition process, determine the critical path activities and duration for this integrated network, and examine the influence of integrating activities within the integrated network. This primary objective will be achieved by accomplishing the following subobjectives:

1. Provide a broad overview of the facilities acquisition process and the weapons system acquisition process, with special attention given the competitive flyoff acquisition strategy, so as to establish a common information baseline for all subsequent analysis. Additionally, providing such an overview will provide integrating information for readers who are not familiar with the weapons system

acquisition process of the facilities acquisition process;

2. Develop a PERT network diagram for the facilities acquisition process, and a probability distribution for the duration of the facilities acquisition process from the PERT network;

3. Develop a probability distribution for the weapons system acquisition process;

4. Develop a PERT network diagram for the weapons system acquisition process, and use it as the model for competitive flyoff weapons system acquisition procedures;

5. Determine the critical path for each network diagram developed in subobjectives 2 and 4 above, and perform some comparative analyses between the two networks.

#### Justification

The use of network analysis in the evaluation of this research hypothesis has a number of significant analytical advantages. First, network analysis can tell the whole story by showing all critical relationships between different activities (14:136). A prime consideration in this research effort is that network analysis also increases awareness of the problems involved, and their relative importance in the overall operation (5:1). Finally, network analysis offers flexibility in the level of aggregation used in developing the network, with different levels of summarization available for different levels of management. Aggregate networks help to eliminate the parochial viewpoint that each department

or agency has in its own view of the project and their particular place in it (14:137-138).

Network analysis based on completion of the previously noted subobjectives offers an opportunity to identify critical interrelationships and allow better planning and enhanced control in future developments.

#### Scope/Limitations

The competitive flyoff acquisition strategy will be the only acquisition strategy studied because of time constraints on the study. Because only one strategy can be studied, the competitive flyoff strategy has three properties which make it especially worthy of analysis. The first of these properties concerns the dual development that characterizes the initial stages of this weapons system acquisition strategy. This dual system development requires some redundancy in systems support, such as when different facilities requirements must be planned for both weapons systems in the competition. The second property concerns the safeguarding of competition sensitive information during the initial stages of the acquisition process, so as to not give one contractor any kind of unfair advantages over another. The third and final property relates to the different schedule milestones that are encountered in a competitive strategy. This reflects the fact that different weapons systems under consideration in a competitive strategy will not have the same schedule milestones for deployment, due to



manufacturing and design differences, as well as such factors as leadtime requirements for major components and other supplier constraints.

These three properties distinguish the competitive flyoff strategy from other acquisition strategies so much so that an analysis of facilities support for the competitive flyoff strategy may not be precisely relevant for any other weapons system acquisition strategy. But these same constraints could be especially demanding of facilities support efforts and, therefore, warrant initial attention.

The A-10 weapons system will be used as the model for the weapons system acquisition process because it was the first system since the TPP era to be fully developed and procured under the competitive flyoff strategy. Also, the A-10 system development appears to be representative of development using the competitive flyoff strategy for all weapons systems, and development data is readily available for analysis.

The facility acquisition process analysis will be based on the construction of a single facility that costs approximately \$5 million and is funded through the MCP. Basing the analysis on a single facility still allows for concurrent development of other facilities that may be required to meet an IOC, but does not overly complicate the network with multiple parallel development plans for each facility being acquired under the same MCP funding appropriation. It should be noted that the facility being assumed for acquisition in

this study does not imply that that kind of facility, or facilities of the same general characteristics, are required to beddown new weapons systems. Many weapons systems beddowns require no MCP-funded facility construction, and some require even more than is assumed to be required here.

Also, the facility studied in the network will be assumed to be a high priority project with the Army Corps of Engineers serving as the design and construction agent. Other general assumptions are that: 1) the facility development will require an environmental assessment, but with a finding of no significant impact (FONSI); 2) the major command who will operate the weapons system at the beddown base also has the responsibility for the base; and 3) the major command will be designated to serve as the AFRCE, rather than one of the three regional AFRCEs under Headquarters, USAF. From the discussion with Mr. George Taylor, Chief of Systems Facilities Branch, Aeronautical Systems Division Civil Engineering, these conditions present reasonable and not atypical construction program characteristics for a new weapons system beddown (23).

Finally, another basic assumption is that the facility must be fully operational before the IOC can be considered complete. This necessarily precludes operational use of the weapons system until the facility is fully operational.

## CHAPTER 2

### THE ACQUISITION PROCESSES

Before a full understanding of the integrated weapons system acquisition process/facilities acquisition process can be obtained, it is first necessary to establish a common baseline of information for comparison and analysis. This chapter will offer a brief overview of the weapons system acquisition process and the facilities acquisition process. Because of the complexity of each of these acquisition processes, only the most important elements of each will be presented here, with the intent being to capture those elements of each acquisition that are common to all applications of such an acquisition.

This broad overview is intended to provide the baseline of information for the more detailed analysis that is the focus of this research effort, and it is also intended to give the reader a more complete understanding concerning the whole acquisition process. Additionally, it will help put the more detailed PERT networks in perspective and, hopefully, make them easier to understand and interpret. The overview presented is intended to be descriptive rather than normative, so as to enhance understanding as much as possible and yet not be prescriptive regarding any particular acquisition strategy or methodology.

The weapons system acquisition process will be described first, since it is preeminent over and encompasses the facilities acquisition process in the development and deployment of a weapons system.

#### The Weapons System Acquisition Process

The weapons system acquisition (WSA) process for major weapons systems consists of five phases, with three major decision points. The five phases are the conceptual phase, the validation phase, the full-scale development phase, the production phase, and, finally, the deployment phase. The three major decision points are called Milestones I, II, and III, and require approval from the Secretary of Defense (SECDEF) before the WSA for that particular system can proceed.

Even before the conceptual phase begins, however, an operational need must exist to justify the development of a new weapons system.

The Air Force looks to the major commands to continuously analyze their mission capabilities and identify operational needs. Operational needs may result from a projected deficiency or obsolescence in existing systems, a technological opportunity, or an opportunity to reduce cost [8:11].

A Statement of Operational Need (SON) is developed for those operational needs that cannot be satisfied with existing capabilities, and that will likely lead to a new system development. Validation of the SON by the appropriate authority constitutes the Milestone 0/Program Initiation decision and commencement of the conceptual phase. For major

systems, an additional document, the Mission Element Need Statement (MENS) is prepared and used to communicate the need to the SECDEF before the Milestone 0/Program Initiation Decision.

Following SECDEF approval of the MENS, HQ USAF provides formal direction to the implementing and participating commands by using a Program Management Directive (PMD). The PMD is used during the entire acquisition life cycle to state requirements and request studies as well as initiate, approve, transfer, modify or terminate programs [8:18].

#### The Conceptual Phase

The conceptual phase is highly iterative, but can be categorized into three sections: identification, analysis, and approach preparation.

The identification section is concerned with identifying alternative means of satisfying the Statement of Need. Industrial contractors, government laboratories, and educational institutions can all be involved in the identification of alternatives to meet the mission need. Active participation by the operational command is also required during the identification of alternatives effort to insure system alternatives properly reflect user needs and preferences.

Rigorous analysis is performed on all of the proposed alternative solutions to determine the feasibility and the risks involved in the proposals. Theoretical cost estimates are developed, as well as many tradeoff studies, and some "breadboard" studies may also be performed to support assertions or proposals (17:2).

The approach preparation section of the conceptual phase concerns the formulation of the management team and the generation of the management program to be used for further development of the system. During the conceptual phase, the program manager is designated, along with the charter stating his responsibility, authority, and accountability (8:19). A functional baseline for the weapons system is established by the newly-formed program office during this phase that includes broad system performance objectives, an operational concept, a logistics concept, and cost estimates (3:2-8).

Another major product of this phase is the Program Management Plan (PMP). This includes initial development of the Statement of Work (SOW) and Request for Proposal (RFP), as well as specifying the basic management approach to be used in any further phases of the program. The PMP also specifies aspects of program office/contractor relationships, the types of management reports to be generated, the Program Cost Schedule Control System (PCSCS), the master program schedule, the targeted IOC date, and other managerial control information (3:2-9).

The findings and recommendations generated during the analysis period of the conceptual phase are consolidated into a decision coordinating paper (DCP) that is presented for DSARC I review and subsequent DSARC recommendations concerning program continuation. The DSARC recommendations are presented to the SECDEF for his approval. The SECDEF-approved

DCP constitutes the program continuation decision and Milestone I.

#### The Validation Phase

The SECDEF's approval at Milestone I is communicated to the system program office (SPO) through a revised PMD, which initiates the validation phase of the system acquisition process. The objectives of the validation phase are to determine whether to proceed with full-scale development for the system, and to establish firm and realistic performance specifications which meet the operational and support requirements (3:3-5). The thrust of the effort to meet these objectives is to reduce the technical risk and economic uncertainty through a more detailed definition of the new system.

The validation phase is typically accomplished predominantly by defense contractors under SPO direction in one of three ways: 1) design definition paper studies, 2) hardware prototyping, or 3) some combination of both (17:2).

Design definition is an approach to validation wherein two or more defense contractors, under the SPO's direction, use system studies and detailed engineering analysis to define the proposed system. The resultant products, using this strategy, are detailed system specifications, performance specifications, initial hardware configuration specifications, refined cost estimates, and schedule projections. This detailed paperwork is then used by a source selection board to

evaluate the proposals and detailed studies and select the best proposed system for further development (17:2-3).

In the hardware prototyping strategy, actual system hardware is fabricated and evaluated in a competitive flyoff. For a flying system such as a new fighter aircraft, this involves building and flying a testbed system. It is important to understand that this approach is concerned with "the fabrication of a system resembling the operational system only to the extent that performance objectives can be validated [1:55]." The data gathered from the competitive flyoff constitute part of what is presented to a source selection board for evaluation and selection of the best system for further development.

While the hardware prototyping strategy has achieved its greatest notoriety from whole system competitive flyoffs, it is also used extensively for subsystem development, test, and evaluation. Avionics, armaments, propulsion systems, and almost all other subsystems can be competitively tested. In very large system acquisitions, where a total system competitive flyoff is cost prohibitive, subsystem hardware "competitive flyoffs" can and have been successfully employed.

A corollary effort to the hardware fabrication and testing effort in the competitive flyoff strategy is the development of contractor, full-scale development program management plans. These plans are structured so they can be implemented contractually for full-scale development. These plans must specifically answer questions concerning system



producibility, management ability, and other system specific information (3:3-8).

Near the end of the validation phase, the source selection authority will select that system that is recommended for further development in the full-scale development phase of the WSA process. Also in the validation phase, the SPO develops the RFP for the full-scale development phase.

The SPO also generates an updated DCP at the end of the validation phase that is forwarded through the DSARC process for DSARC II and subsequent SECDEF approval. SECDEF approval of the updated DCP constitutes Milestone II, or the Ratification Decision, and the commencement of the full-scale development phase (3:3-11).

Approval to proceed into the full-scale development phase is based on assurance that:

- (1) System tradeoffs have produced a balanced and realistic set of performance parameters.
- (2) Risk areas have been identified and reduced to acceptable levels.
- (3) Cost/schedule estimates for full-scale development are acceptable.
- (4) Contractual aspects are sound (terms and conditions are appropriate to risk, and funding related to milestones) [3:3-11].

#### The Full-Scale Development Phase

The full-scale development phase follows the validation phase, with the objective of this phase being the fabrication and testing of pre-production prototypes. To accomplish this objective, the system design is finalized with comprehensive and complete design reviews, and engineering drawings

are prepared. It is also during this phase that the critical design review is held, which is the "last chance to comment on the developing design before commitment to accept the design [8:35]."

A major effort during this phase is development, test, and evaluation (DT&E). The DT&E purpose is to:

- Demonstrate that engineering design and development are complete,
- [Demonstrate that] design risks have been minimized,
- Demonstrate that the system or equipment meet specifications, and,
- Verify that proposed design changes do not degrade overall system performance [8:37].

Another type of testing conducted during the full-scale development phase is initial operational test and evaluation (IOT&E). The objectives of IOT&E are to:

- Estimate military utility, operational effectiveness and suitability;
- Provide feedback prior to key milestone decisions;
- Demonstrate that the system can be supported logistically in a deployment status;
- Identify new uses for the system; and
- Reshape tactics [8:39].

The IOT&E is an operational assessment of a system where the whole system is evaluated against operational criteria. IOT&E is the complete system-testing conducted before a production decision, while complete system-testing after a production decision is called follow-on operational test and evaluation (FOT&E).

It is important to note that the prototype fabricated during the validation phase for a competitive prototyping strategy is different from the pre-production prototypes fabricated during the full-scale development phase. The

prototypes fabricated during the full-scale development phase are "more representative of the operational system than was the validation phase prototype, which emphasized performance characteristics [17:3]."

During the full-scale development phase, detailed logistics support planning, deployment planning, and training plans are formulated to support the production decision and the production phase. Extensive production planning and some limited expenditure on production may also occur during this phase (3:4-6).

After sufficient testing and developmental planning, a revised and updated DCP is prepared and submitted to the Secretary of the Air Force for review. The DCP then proceeds through DSARC III for approval and is then forwarded to the SECDEF for his approval. His approval constitutes the production decision and the initiation of the production phase and Milestone III.

#### The Production Phase

The fourth phase of the weapons system acquisition process is the production phase. During this phase, the system enters into production in two distinct periods. In the first period, initial tooling and production is accomplished to bring the system production to the planned peak rate. The second period is concerned with follow-on production after the peak rate is achieved (3:5-1).

Sometime during this phase, program management

responsibility transfer (PMRT) is also accomplished. PMRT is the formal act of termination of the implementing command's program management responsibility and the transfer of that responsibility to the Air Force Logistics Command (AFLC) (3:5-6).

One of the main management functions during the production phase is the physical configuration audit (PCA). During this audit, the detailed specifications are compared with the production hardware and all acceptance tests are verified to be complete.

#### The Deployment Phase

Immediately following the production phase, and most often concurrent with it, the deployment phase covers the introduction of the new system into the field for operational use. In this stage all support facilities and equipment must be fully developed and ready for use. This includes activation and operation of depot support for the system, as well as all required support at operational bases.

Congressional review and funding of the WSA is accomplished during all five phases of the WSA process. SECDEF decisions at Milestones 0, I, II, and III must subsequently be included in the Five Year Defense Plan (FYDP) at the next Program Objectives Memorandum (POM) submission (8:18). This insures Congressional review and Congressional control of each specific weapons system acquisition program's funding and schedule.

### The Facilities Acquisition Process

The facilities acquisition process often acts in support of the weapons system acquisition process to provide new or modified facilities to support the weapons system operation, but the facilities acquisition process also acts independently to provide support facilities not associated with any particular weapons system. Despite the reason for the facility, or how the requirement for the facility is generated, all facility acquisitions follow essentially the same process. Those construction projects with a funded cost of less than \$500,000 do not require submittal through the military construction program (MCP), while those projects with a funded cost over \$500,000 do require submittal through the MCP (25:2-8). This review of the facilities acquisition process will only cover the formal MCP process.

There are essentially four phases to the facilities acquisition process under the MCP. They are: 1) requirements identification and justification, 2) programming and funding, 3) design, and 4) construction.

#### The Requirements Phase

The requirement for a new facility may come from many sources. It may be generated as a result of a mission change for the base wherein existing facilities cannot adequately support the new mission. In these situations, the requirement for new facilities originates with an agency or office not located on the host base. This is the type of requirement

of concern in this research. For a new weapons system bed-down, for instance, the facility requirements to support the new weapons system are generated by the weapons system prime contractor, who then forwards them to the host base civil engineering organization and, concurrently, to the civil engineering organization advising the SPO. The host base civil engineering organization, in conjunction with the civil engineering organization advising the SPO, then determines which existing facilities are adequate to support the new mission, which facilities will have to be modified, and what new facilities will have to be built.

New facility requirements may also be generated by deficiencies in support of already existing base missions. Requirements of this type require strong justification by the user to fully document the deficiency and its impact on the user's mission.

Another means of identifying new facility requirements is when existing facilities must be replaced due to structural unsoundness, catastrophic damage, or because of hazards to health and safety. This type of requirement also includes replacing facilities that have deteriorated to the point they are not economical to maintain or operate. Extensive user participation in the justification is also required for this type of requirement identification to support the action proposed (25:3-1).

### The Programming Phase

No matter how the requirement for a new facility is generated, the programming phase begins with the host base civil engineering organization. The host base civil engineering organization prepares an annual MCP submittal package (DD Form 1391, Military Construction Project Data) as specified in AFR 86-1, Programming Civil Engineer Resources, and in the MCP submittal guidance. This submittal package includes essential project information to support review requirements at higher command levels.

The initial DD Form 1391 package is submitted to the major command (MAJCOM) when the MAJCOM relays the MCP call message from HQ USAF to the bases for the annual MCP submittal. The MAJCOM reviews the base submittal for accuracy and completeness, and forwards the MAJCOM-supported program to HQ USAF by the date specified in the call notice.

HQ USAF reviews the submittals from the MAJCOMs and selects the projects that will be included in the POM and forwarded for OSD and Congressional review, approval, and funding. After HQ USAF has selected the supported program, design instructions are issued by HQ USAF to the MAJCOM or the AFRCE designated to be the project manager for those projects being supported, so that 35 percent design completion can be accomplished before the MCP program is presented to Congress.

After the base civil engineering organization has submitted the initial DD form 1391 package, work begins on

the full DD Form 1391 package and the project book (PB) for the projects being supported by the MAJCOM. This more complete documentation includes information essential to the design and construction of the project. This information is sent to the MAJCOM when it is requested, where it is reviewed and forwarded to HQ USAF and to the AFRCE, if the AFRCE is the design and construction management agency. The PB is prepared in accordance with instructions contained in AFR 89-1, Design and Construction Management.

After the PB is received at HQ USAF, the program is sent to OSD for review, and then it is sent to Congress for authorization and appropriation. The MCP is sent to Congress on the 15th of January each year, and Congress then holds hearings on it, with approval usually occurring in the following September. Funding is obtained after the President signs the bill and apportionment is accomplished.

#### The Design Phase

The design phase begins when HQ USAF issues design instructions as noted in the previous section. This design instruction is issued to the AFRCE, or the MAJCOM designated to function as the AFRCE, who then commences the design with an in-service design agent or initiates the selection of an Architecture-Engineering (A-E) firm to perform the design under contract. The Army Corps of Engineers or the Navy Facilities Engineering Command, as well as the Air Force MAJCOM, can serve as the in-service design agent. The determination of



an in-service or contract design is predicated on the type of project, urgency, and any special design considerations that may be required (11:12).

The design effort must be at least 35 percent complete before the project is forwarded to Congress for funding (19:26) so the design phase occurs concurrently with the latter elements of the programming and funding phase. The objective is to have the facility 100 percent designed and construction contract preparation complete when the MCP bill is signed and the funding is apportioned.

The design effort involves extensive cooperation, coordination, and review by all interested and affected parties. This includes the user, the MAJCOM, the AFRCE, the base and the design agent, and involves extensive reviews at specific stages of design as specified in AFR 89-1. This close and detailed involvement in the design stage is intended to insure a minimum of design changes and maximize effectiveness for the using organization.

#### The Construction Phase

The construction phase begins as soon as the invitation for bids (IFB) is prepared and distributed to interested contractors. After bids are received and the contract awarded, a pre-construction conference is held to acquaint the contractor with any constraints that must be met concerning site access, material storage, and other preliminary information. The facility is then constructed by the contractor under the

supervision of the construction agent, which is normally the same agency that served as the design agent. Continuing inspections of the facility during construction are accomplished by AFRCE representatives, and any deficiencies or corrections identified through these inspections are reported to the AFRCE, who then works through the construction agent to effect corrective action.

After the basic contract is complete, a pre-final inspection is accomplished, and all known deficiencies are identified for contractor corrective action. When all corrective action is complete, a final inspection is held, and if the facility is acceptable, the Air Force assumes responsibility and accountability for the facility from the contractor.

Once the facility transfer is complete, equipment installation that is not part of the basic contract can commence. After all necessary equipment is installed and functionally checked, the facility is made available for user occupancy.

The foregoing reviews of the acquisition process have been intentionally broad and general in scope. This was done to provide a common foundation for further analysis. Subsequent analysis of each acquisition process for development of the network diagrams will build on this foundation and supply more detail for selected parts of the acquisition processes.

## CHAPTER 3

### METHODOLOGY

This chapter will discuss and explain the specific methodology used to acquire the data necessary to develop the independent facilities acquisition network, the weapons system acquisition network, and the integrated facility/weapons system acquisition network.

In order to accomplish subobjectives 2 and 4, as stated in Chapter 1, two similar but different methodologies for data acquisition and organization were used. Each different methodology will be discussed as it relates to the accomplishment of either subobjective 2 or subobjective 4. Additionally, a third methodology, related to acquiring descriptions and data concerning the interfaces between the facilities and weapons system acquisition processes, will be discussed. Each of these three different investigatory methodologies was required because of the different ways in which the pertinent data elements were determined.

Three separate acquisition system models (activity networks) were also developed and will be discussed. These three models are: 1) the facility acquisition network model, 2) the weapons system acquisition network model, and 3) the integrated facility/weapons system acquisition network model. The facility acquisition network and the weapons system

acquisition network models were initially developed as stand-alone models, and they were then integrated into a single model--the integrated facility/weapons system acquisition network model.

The facility acquisition network data element determination and the associated model development will be discussed first. The weapons system acquisition network data element determination and its associated model development will be discussed second. Finally, the integration of the two models, and the determination of the necessary data elements to allow this integration will be discussed.

#### Facility Acquisition Network

The facility acquisition network model was derived primarily from the Facility Item Examination (FIX) study conducted by the Engineering and Services staff at Air Force Logistics Command Headquarters in June 1980. The objective of that study was to develop a comprehensive model network for the facility acquisition process. To accomplish that objective, each of the major directorates under the Deputy Chief of Staff for Engineering and Services was tasked to prepare comprehensive networks for their functional area as it related to construction of a major MCP-funded facility. For instance, the Programs Directorate was tasked to identify all activities and events concerning project identification and programming, while the Engineering and Construction Directorate was tasked to identify all events and activities

related to facility design and construction (24:3).

These separately developed parts were then combined into a whole, complete network. The combined network had 756 activities identified, which resulted in a very detailed, but somewhat incomprehensible, facility acquisition network. The FIX project was never fully debugged or completed, however, because it was superceded by more urgent studies and requirements (7).

The data elements from the FIX network were used as the basis for the facility acquisition network developed for this study, but with some important changes. The first of these changes was the combination of many of the activities into one activity whenever possible. This higher level of aggregation resulted in a simpler, more easily understood network, but at the cost of some detail. This aggregation was necessary, however, because the extreme detail of the FIX network made it difficult to understand the network as a whole. There was so much detail that it was difficult to identify the essential tasks and activities, difficult to comprehend the total process work and information flow, and difficult to identify critical decision points in the process. These essential activities and events were masked by the sheer volume of information that was presented.

A second reason why the network was aggregated and condensed was because it was to be used as an input to the integrated acquisition network, and that network had to be comprehensible too. Because essentially all activities in

the facilities acquisition network were to be included in the integrated network, any excess complexity in the facility acquisition network would be continued in the integrated network, making it more difficult to analyze and understand.

Consistent with standard PERT practice (4; 5; 6), three time estimates (optimistic, most likely, and pessimistic) were developed for each activity in the facility acquisition network. These time estimates were derived from time estimates in the FIX network and by personal interviews with personnel on the AFLC Engineering and Services staff. Initial time estimates for the aggregated network were determined by simply adding corresponding time estimates between events in the FIX network that defined the aggregated activity. This method, however, causes a distortion of the probability distribution for the optimistic and pessimistic time estimates and could not be considered reliable for these time values. Such a methodology does not tend to disturb the most likely time estimate for the aggregated activity, however.

To verify the accuracy of the most likely time estimates as determined from the FIX network, and to more accurately assess the pessimistic and optimistic time estimates, personal interviews were held with the AFLC Engineering and Services staff. During these interviews, the staff personnel were asked for the optimistic, most likely, and pessimistic times for activities as they appear in the aggregated network. In all cases, the time estimates for the most likely times were consistent with the most likely time estimates determined

from the FIX network. The time estimates for pessimistic and optimistic times were used as determined from the interviews and not from the FIX network summation.

As an example, let Figure 1a represent the activities and events in part of the FIX network, and let Figure 1b represent the corresponding aggregated activity as in this study. The initial estimate of the time values for Figure 1b were obtained by summing the longest path in Figure 1a, or v, w, x, y, z and using the sums as values for aggregated activity A, as shown.

But since the optimistic and pessimistic time estimates in Figure 1b do not reflect the 1 in 100 chance for activity completion required for the beta distribution, the time estimates obtained from the personal interviews were used. Thus, the time estimates used for this analysis might turn out to be as shown in Figure 1c.

The logic of the facility acquisition network model was verified by having several civil engineering officers with various experience backgrounds review the model for consistency and completeness. Particular attention was paid to predecessor/successor event logic relationships in the model formulation, and these relationships were verified from elements of the FIX network, from the personal interviews, and by the civil engineering officer reviews.

The correlated and verified data were then used to develop the facility acquisition model for this study. Appendix A contains the data input to the facility acquisition

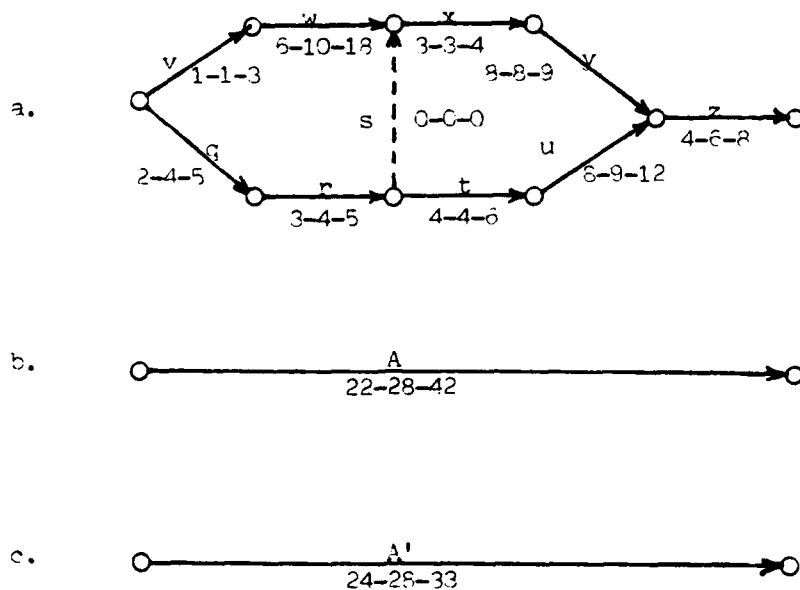


Figure 1

#### Time Estimate Determination

network model. The predecessor and successor event numbers defining each activity are given, as are the activity description and the time estimates used. It is important to note that all time estimates were input in weeks and days format. The last digit of each time estimate is days, but all digits preceding the last digit designates the activity duration in weeks. Thus, a time estimate of 213 means 21 weeks and 3 days, while a time estimate of 105 means 10 weeks and 5 days. Also included in the appendix is a numerical designator and description of the events in the facility network model.



### Weapons System Acquisition Network

The data acquisition procedure for developing the weapons system acquisition model differed from the facility acquisition network model development because the A-10 weapons system had been selected as the model baseline and actual historical data were available and used. In other words, instead of a theoretical data baseline being used as in the facility acquisition model, actual dates and time interval data were available and used in the weapons system acquisition model development.

Further, only one activity duration time interval was used with each activity designated in the network, and the time interval used was the actual time required for accomplishment. This approach was used because data were not available to determine the optimistic, most likely, and pessimistic time estimates for each activity, but were available for the actual time durations that occurred. The problem with this approach is that the use of only one time estimate does not allow the development of a beta distribution for each activity, and thus does not allow the determination of variance for each activity in the network. The computer program used for analysis uses the single, actual activity time value the same way it uses the expected time value derived from the beta distribution when three time estimates are given.

The use of actual time data and only one time estimate is not to imply that there is not a great deal of variance

within individual activities and within major phases of a weapons system acquisition process. As was pointed out in Chapter 1, no two weapons system acquisitions are alike, and thus different time durations for their development must be expected.

Figure 2 shows various time estimates for the different phases of a weapons system acquisition. The variables of size of the program, importance of the program, acquisition strategy used, manpower available, funding, and other variables will all influence the system development and acquisition times for a given weapons system. The A-10 system development represents only one case of weapons system acquisition times, and using actual dates can only capture a "snapshot" of a dynamic situation.

Even though using the actual A-10 development times represents only one point on a continuum of possible development times, the A-10 system development as a whole is not inconsistent with the development times for other modern fighter and attack aircraft weapons systems. Table 1 shows major milestone dates for all major aircraft weapons systems since World War II, including prototype developments (designated by a P) and the A-10 system. The mean time between development start (FSD) and first flight for all tabulated fighter and attack aircraft systems, excluding prototypes, is 24 months, with a range of 9 to 37 months. The A-10 system took 25 months, a difference of only one month and less than  $.143\sigma$  ( $\sigma = 7.09$  months) from the mean value. The mean time

# SYSTEM LIFE CYCLE

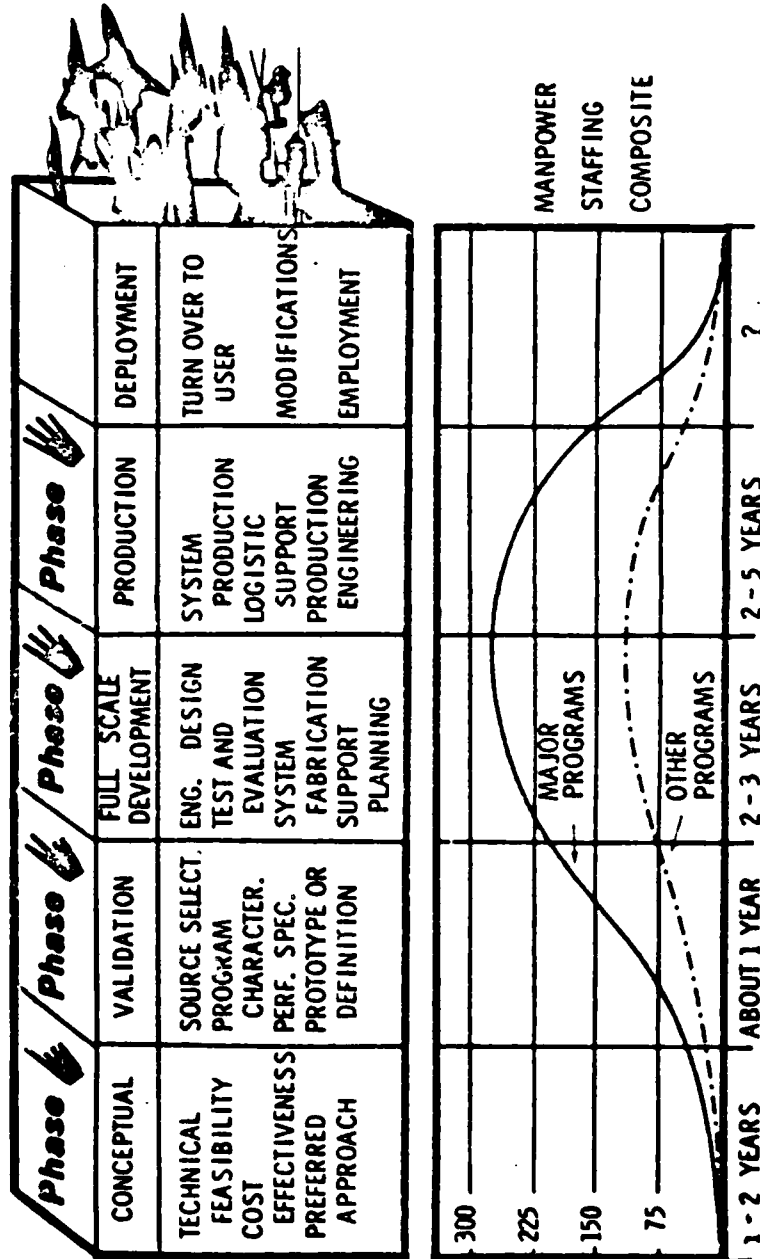


Figure 2

System Life Cycle [1:37]

for months to first delivery from FSD start for fighter and attack aircraft, again excluding prototypes, is 39.68 months, with a range of 14 to 68 months. Here the A-10 system took 34 months, a difference of 5.68 months, or  $.35\sigma$  ( $\sigma = 15.96$  months) from the mean.

The data in Table 1 span three decades, however, and it may reasonably be asked does this data display any trends, for instance, is "months from FSD to IOC" changing over time? Rand researchers who developed Table 1 did a regression analysis to test for trends in the time period from FSD start to first flight (column 3 in Table 1). The regression analysis yielded a line of nearly zero slope, indicating no statistical evidence that a trend has developed in the time from FSD start to first flight over the three decades encompassed by the data of Table 1, for fighter and attack aircraft only (20:25).

A similar regression analysis for the time from FSD start to first operational delivery was performed by the Rand researchers (column 5 in Table 1), again to test for trends over the three decade span. For fighter and attack types only, excluding prototypes, the analysis yielded a slope of plus five months per decade, with a significance probability of 15 percent (20:25). This finding led the Rand Corporation researchers to conclude that:

Although the regression tests suggest a change in interval duration of several months per decade, the large significance probability associated with all of the tests suggests some caution in asserting that any real change has occurred [20:25].

TABLE 1  
ACQUISITION INTERVALS FOR SELECTED AIRCRAFT SYSTEMS

Model		Devel- opment Start Date (1)	First Flight Date (2)	Months to First Flight (3)	First Opera- tional Delivery (4)	Months to First Delivery (5)	200th Opera- tional Delivery (6)	Months to 200th Delivery (7)	Time to Produce 200 a/c (8)
F-84	P	11/44	2/46	15	6/47	31	4/48	41	10
F-84		1/45	1/47	24	6/47	29	4/48	39	10
F-86	P	5/45	10/47	29	5/48	36	10/49	53	17
F-86		12/46	5/48	17	5/48	17	10/49	34	17
F3D	P	4/46	3/48	23	8/50	52	4/53	84	32
F3D		6/48	2/50	20	8/50	26	4/53	58	32
F-89	P	6/46	8/48	26	9/50	51	1/54	91	40
F-89		10/48	6/50	20	9/50	23	1/54	63	40
F-94		10/48	7/49	9	12/49	14	4/51	30	16
F4D	P	12/48	1/51	25	5/55	77	8/57	104	27
F4D			6/54		5/55		8/57		27
F-100	P	10/51	5/53	19	10/53	24	7/55	45	21
F-100		2/52	10/53	20	10/53	20	7/55	41	21
F-101		10/51	9/54	35	5/57	67	5/58	79	12
F-102		9/51	10/53	25	6/55	45	1/57	64	19
F-104	P	3/53	2/54	11	1/57	46	12/58	69	23
F-104		7/54	2/56	19	1/57	30	12/58	53	23
F-105		9/52	10/55	37	5/58	68	4/61	103	35
F-106		11/55	12/56	13	6/58	31	4/60	53	22
F-4		5/55	5/58	36	12/60	67	10/62	89	22
F-111		12/62	12/64	24	4/67	52	12/69	84	32
F-14		2/69	12/70	22	5/72	39	7/76	89	50
F-15		12/69	7/72	31	11/74	59	7/77	91	32
F-16	P	4/72	2/74	22	8/78	76	1/81	105	29
F-16		1/75	12/76	23	8/78	43	1/81	72	29
F-18	P	4/72	6/74	26	5/80	97			
F-18		1/76	11/78	34	5/80	52			
A3D	P	3/49	10/52	43	1/55	70	6/60	135	65
A3D			9/53		1/55		6/60		65
A-4		6/52	6/54	24	8/55	38	12/57	66	28
A-5		6/56	8/58	26	2/60	44			
A-6		1/58	4/60	27	4/62	51	2/67	109	58
A-7		3/64	9/65	18	3/66	24	1/68	46	22
A-10	P	12/70	5/72	17	11/75	59	5/79	101	42
A-10		1/73	2/75	25	11/75	34	5/79	76	42

Table 1, continued

Model	Devel- opment Start Date (1)	First Flight Date (2)	Months to First Flight (3)	First Opera- tional Delivery (4)	Months to First Delivery (5)	200th Opera- tional Delivery (6)	Months to 200th Delivery (7)	Time to Produce 200 a/c (8)
B-47 P	10/45	12/47	26	12/50	62	6/52	80	18
B-47	9/48	6/50	21	12/50	27	6/52	145	18
B-52 P	7/48	4/52	45	1/55	78	8/57	109	31
B-52	2/51	8/54	42	1/55	47	8/57	78	31
B-58	2/53	11/56	45	11/59	81			
B-70	12/57	9/64	81	Project	canceled during development			
B-1	6/70	12/74	54	Project	canceled during development			
C-130 P	7/51	8/54	37	12/55	53	2/59	91	38
C-130	9/52	4/55	31	12/55	39	2/59	77	38
KC-135P	5/52	7/54	26	1/57	56	1/59	80	24
KC-135	8/54	8/56	24	1/57	29	1/59	53	24
C-133	2/53	4/56	38	8/57	54			
P-3	4/58	11/59	19	3/62	47	12/66	104	57
C-141	4/61	12/63	32	10/64	42	4/67	72	30
C-5	10/65	6/68	32	10/69	48			
S-3A	8/69	1/72	29	10/73	50			

(1) Formal start of aircraft development. Usually denoted by issuance of a contract, but sometimes by source selection when formal contract ratification was delayed but design work continued. The date shown applies to start of actual hardware design and development, not to the usual design studies that precede actual development. Occasionally (B-58, for example) a development program was started, then canceled, redirected, and restarted. The last such start is noted in the table.

(2) Date of first flight of the very first flight article to emerge from the specified development project.

(3) (2) - (1), in months.

(4) Date at which the first fully operational configuration was accepted by the using service for operational inventory (as opposed to development testing). Note that this does not coincide with IOC, which usually implies delivery of several aircraft to the using command, while the first operational aircraft may well go to a training unit. The intent here was to mark a milestone in the system development program, not to measure establishment of a true operational capability.

(5) (4) - (1), in months.

(6) Date of delivery of the 200th operational item (again excluding the units produced for development testing).

(7) (6) - (4), in months.

(8) (6) - (1), in months. [20:22-24]

The Rand researchers also did a regression analysis for the time from FSD start to 200th operational delivery for fighter and attack types only, excluding prototypes (column 7 of Table 1). The results showed a slope of 12 months per decade and a significance probability of 4 percent (20:30).

From their analysis, the Rand researchers concluded overall that:

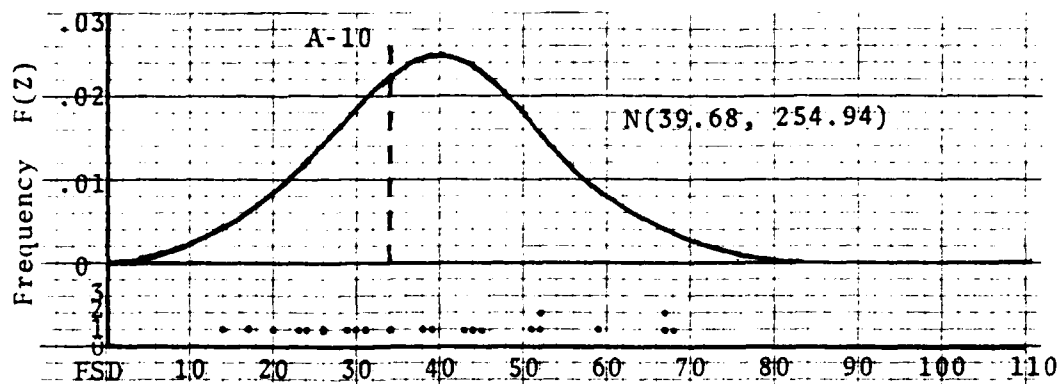
Changes in typical interval duration have been less pronounced in the phases immediately after the start of full-scale development. In fact, there is no evidence that the time required for the initial engineering development of the system has changed significantly during the past three decades. This is rather impressive, considering that aircraft of recent vintage tend to be much more complex than those of earlier times.

Although there is some slight evidence that the test phase (between first flight and first operational delivery) has been lengthening somewhat, the statistical support for such a trend is very weak. . . .

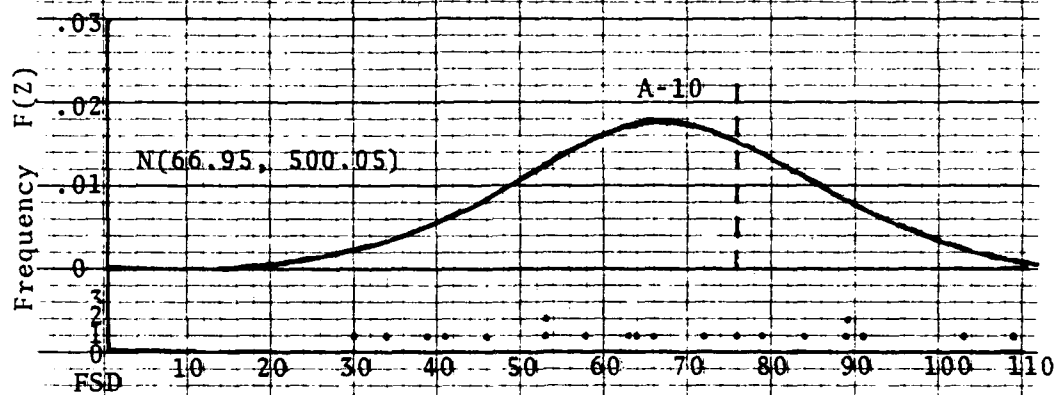
Finally, a clear change has occurred in the production phase of aircraft systems, where average production rate has been steadily decreasing over time [20:36].

The analysis of trends in the data from Table 1 suggests that a better approximation of expectations for future weapons system development times might be obtained by using only the more recent data of Table 1 for analysis. This conclusion seems especially relevant when the time interval under study includes part of the production phase.

To illustrate the impact of using only the more recent data for weapons system development times for fighter and attack types only, excluding prototypes, Figure 3 shows the scatter diagram and empirical distribution for the months to first delivery from FSD start, FSD start to 200th delivery,



a. FSD To Months To First Delivery



b. FSD To Months To 200th Delivery

c. FSD To Months To IDC

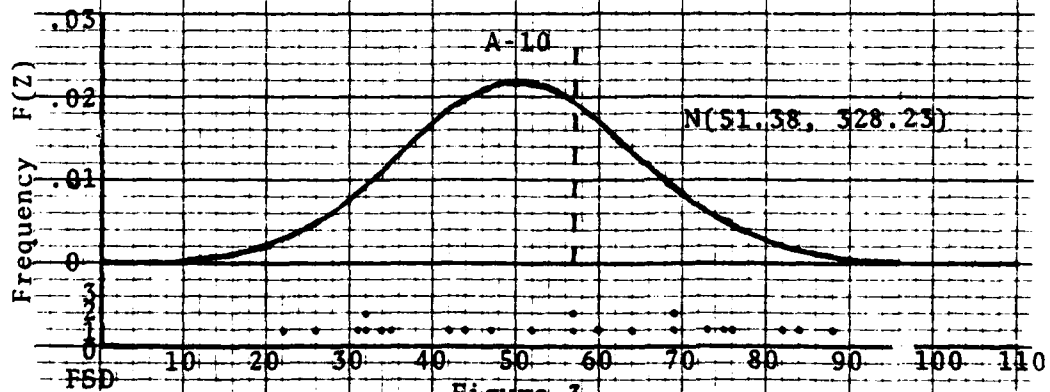


Figure 3

Fighter and Attack System Development Time  
Summary Since World War II



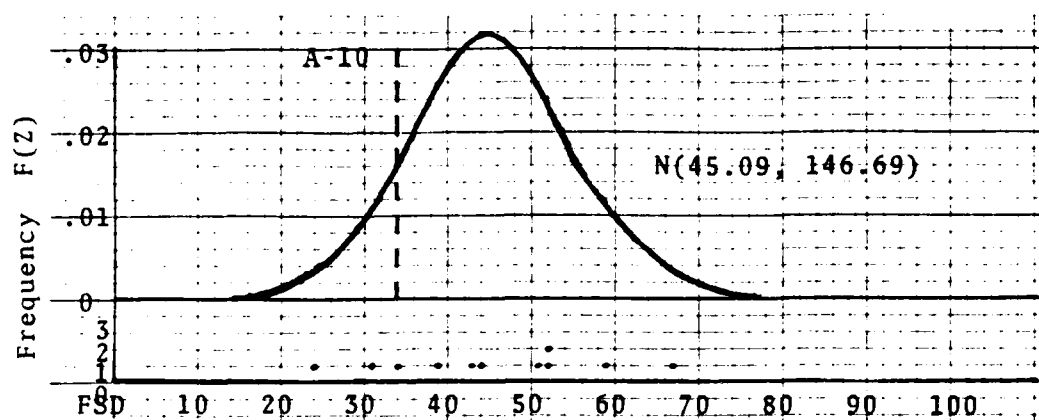
and FSD start to IOC for the data in Table 1. The data on the time from FSD to IOC are not included in Table 1, but were available from information in the Appendices of the same Rand report (20:44-76). The empirical distribution has been assumed to be normal, and the mean and variance for each time interval are shown.

Figure 4 shows the scatter diagram and empirical distribution for the same three time intervals, but limits the data points to fighter and attack type systems, again excluding prototypes, that have been developed since 1955. Again the empirical distribution has been assumed to be normal, and the mean and variance for each time interval are shown.

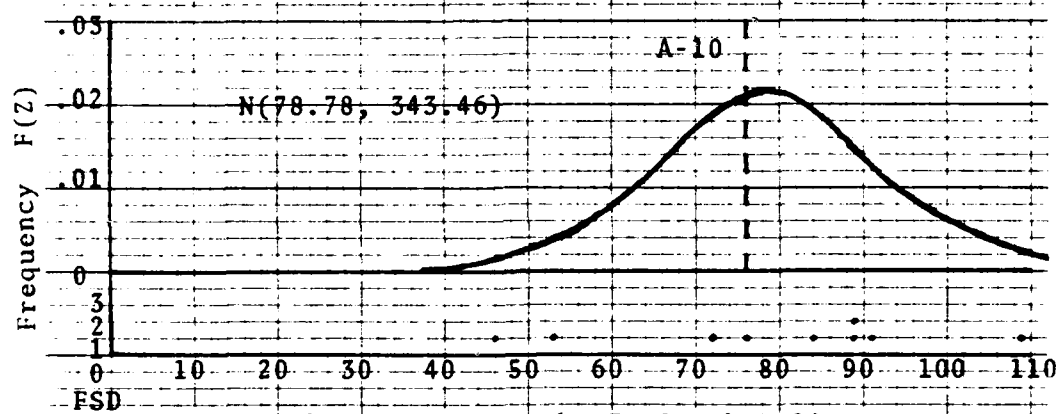
A Kolmogorow-Smirnov goodness-of-fit test was performed on the  $n=10$  data points for Figure 4c, with the result that there is no statistical basis to reject the null hypothesis that the sample distribution is a normal distribution ( $D = .13$ ).

As shown by Figure 4c, the A-10 weapons system development time appears to be representative of an approximately average weapons system acquisition time for fighter and attack type aircraft systems. And as stated in Chapter 1, fighter and attack type aircraft systems are also the most likely to be procured under a competitive prototyping strategy.

The time values used to develop the weapons system acquisition model were obtained from the history of the A-10 development maintained by the Aeronautical Systems Division



a. FSD To Months To First Delivery



b. FSD To Months To 200th Delivery

c. FSD To Months To IOC

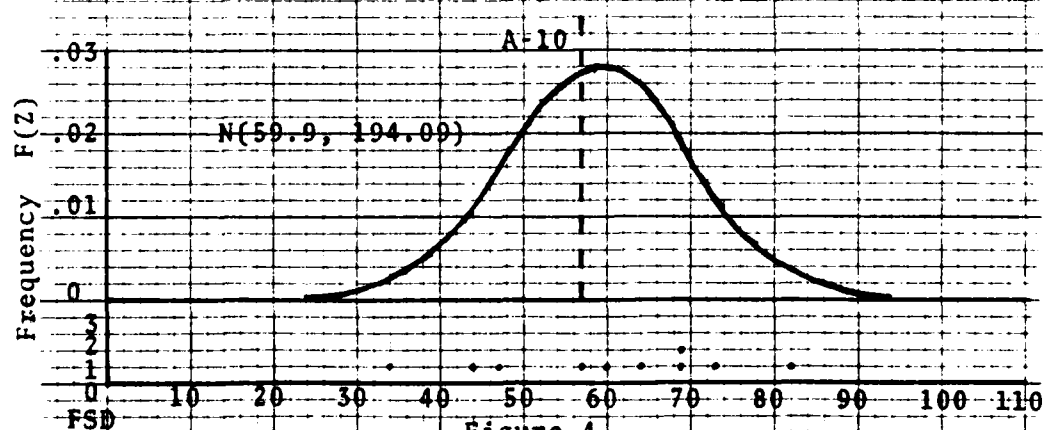


Figure 4

Fighter and Attack System Development Time  
Summary Since 1955

History Office at Wright-Patterson AFB, Ohio (28; 15; 22).

This history contains the date of accomplishment of major milestones (events) during the A-10 development.

Logic relationships for the weapons system acquisition network model were developed from two sources. The logic relationships for activities in the phases of weapons system development prior to full-scale development contract award were derived from the network pattern displayed in Air Force Systems Command Pamphlet 800-3, A Guide For Program Management. Only key activities and interrelationships that clearly define the acquisition strategy in use, that capture important uncertainties, and that contribute to understanding the integration mechanism with the facilities acquisition network have been included.

The logic relationships for all activities subsequent to full-scale development contract award were derived from the network diagram developed by Fairchild Republic Company and used for overall system management during the A-10 acquisition (9).

As with the facilities acquisition network model, the weapons system acquisition model is at a higher level of aggregation than the constituent elements from which it is derived. The Fairchild Republic Company management network for the full-scale development and subsequent phases had 324 events designated, while the weapons system acquisition network model finally developed had only 117 events in total. This compression and aggregation was required to keep

unnecessary detail out of the network model, and to keep the model straightforward enough to readily identify important relationships and activities. Also, since this network model is also a constituent element of the integrated network model, the weapons system acquisition model could not be so large or so small as to obscure important relationships when the two subordinate models were integrated into one.

Each of the subordinate models was designed to capture the key interrelationships and activities for each acquisition process, and to capture those activities that are critical to the interface between the weapons system acquisition model and the facilities acquisition process model.

Finally, the weapons system acquisition network model was constrained to a ten-year calendar due to the requirements of the computer program used for analysis, and thus the early phases of planning and system definition that occurred prior to ten years before the IOC date were eliminated from the analysis. As a result of this time constraint, the beginning event for the weapons system acquisition network model is the re-orientation of the acquisition to a competitive prototyping strategy by the Secretary of the Air Force. Prior to this event, and not included in the network model, were detailed conceptual studies, mission analyses, and some contractor effort to determine different system alternatives for the mission need.

As in the facility acquisition network model, data were input using the weeks and days format for time estimates.

The data input to the weapons system acquisition network model is shown in Appendix B.

### Integrated System Acquisition Network

The facility acquisition network model and the weapons system acquisition network model constitute the primary input data for the integrated system acquisition network model. The interface activity time estimates and logic relationships between the two subordinate models, as well as the identification of the interface activities themselves and their tie-in points, were determined from the files of the Aeronautical Systems Division Civil Engineering Office, Systems Facilities Branch, and from personal interviews with personnel from that office.

No new events were added to those already existing in the two subordinate and constituent network models. Various activities were added between the existing events to integrate the two models into one. The input data for the integration activities followed the same format as used in the preceding model developments. Time estimates were input as weeks and days, and all input data are shown in Appendix C.

Discussion of the three model networks, and the associated logic diagrams for each, is reserved for the next two chapters.

## CHAPTER 4

### ANALYSIS

This chapter will present the analysis of each of the three model networks, in turn. The analysis will examine the logic diagram developed for each of the three networks, identify the critical path in each network logic diagram, and examine the sensitivity of the critical path in each network. The sensitivity of the critical path in each network will be examined with a view as to what it takes to get a new critical path.

To a limited extent, the sensitivity of individual activities to duration changes will be examined. The vehicle for this examination will be the variance of each activity as determined from the beta distribution for each activity. Because only activities in the facility acquisition network and integrating activities between the facility acquisition network and the weapons system acquisition network have the three time estimates necessary to compute a variance, only they will be examined for sensitivity to change in individual activities.

For those activities for which a variance has been computed, the probability of each activity being completed by the scheduled date (or the latest allowable date if a scheduled completion date is not specified) will be examined. Special attention will be accorded to those activities with a low

probability of accomplishment.

#### Facility Acquisition Network Model Analysis

The computer-generated portion of the analysis of the facility acquisition network model is given in Appendix D. The discussion and analysis of the facilities acquisition network presented in this chapter is based on that computer analysis, but will only address salient elements of the detailed analysis of Appendix D. The reader is referred to Appendix D for the detailed calculations for each activity and event in the network.

The facility acquisition network model construction and analysis was based on the assumptions given in Chapter 1. Additionally, a beginning date for the network was chosen that would provide an easily recognizable benchmark and that would allow direct comparison with the stand-alone weapons system acquisition network model. The beginning date of 15 January 1973 was chosen for the dummy start date for the network and does not imply that all facility acquisitions start in January or any other month. Requirements for new facilities can be generated and the programming cycle initiated at any time.

A number of required dates are associated with the facilities acquisition network model. These required dates denote deadlines that must be met for the annual MCP submittal, and are levied by the MAJCOM, HQ USAF, Office of the Secretary of Defense (OSD), and Congress to assure sufficient review and program selection time at each review level. For instance,

the MCP program must be submitted to Congress on the 15th of January in the year it is programmed (1975 for this study). OSD requires the MCP program by the preceding October (October 1974), and HQ USAF requires the full project books for the MCP program in the preceding August (August 1974). The MAJCOM, in turn, requires the full project book (PB) one month earlier (July 1974). The abbreviated project book must be submitted to the MAJCOM by the preceding November (November 1973). The initial DD Form 1391 must be received by HQ USAF in October of that same year (October 1973), and the same document must be submitted to the MAJCOM two months earlier (August 1973).

The activities and events enumerated in Appendix A are shown graphically in Figure 5 as a logic diagram. The minimum slack, or critical, path is identified by the doubled activity line. Only the event numbers are shown in Figure 5, but cross-referencing the event numbers with the activity and event descriptions given in Appendix A identifies the critical path as being the programming and approval process, including the Congressional authorization and appropriation. Specifically, the critical path follows the development of the initial DD Form 1391 submission, through the MAJCOM and HQ USAF reviews, and the inclusion of the facility requirement in the POM. The critical path continues through the OSD and Office of Management and Budget (OMB) review process into the Congressional authorization and funding. After Congressional and Presidential approval of the MCP, the critical path continues through



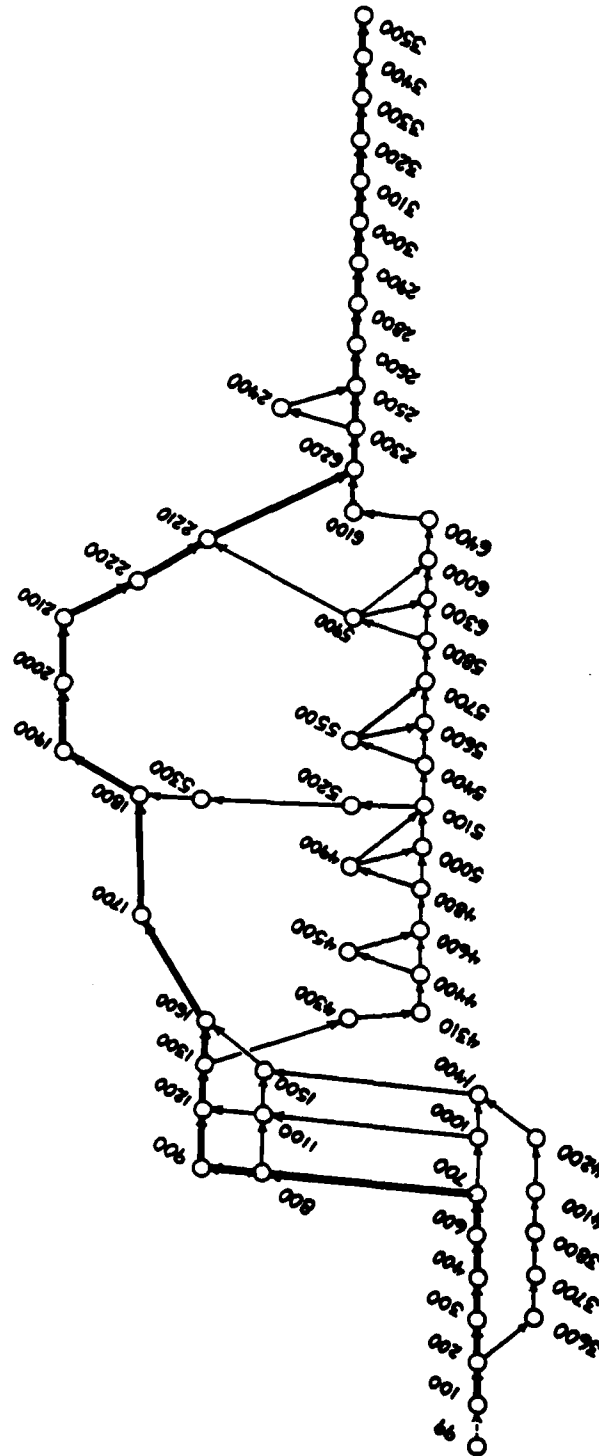


Figure 5  
Facility Acquisition Process Network Logic Diagram

the funds disbursement process and culminates in facility construction, inspection, and equipment installation.

The abbreviated PB development process has a minimum slack of seven weeks, as does the full PB development. The abbreviated PB review at MAJCOM and HQ USAF does allow for issuance of the design instruction with 13.7 weeks of slack, however.

The environmental impact analysis process, events 3600 through 4200, when constrained as given in Chapter 1, has 44.5 weeks of slack, and thus could not create a new critical path unless that slack is eliminated.

More importantly, the design process, events 4300 through 6400, has only 13.7 weeks of slack to meet the requirements of 35 percent design before the project will be submitted for Congressional funding and approval. After the 35 percent design milestone, slack increases in the design process to 16.8 weeks. While 13.7 to 16.8 weeks of slack may seem to be a long time, the design process can slip this amount if there is very much lost design. Lost design is that design effort that is wasted because of changes in requirements or changes to specifications that require a redesign effort. The standard deviation for the design process as a whole is 2.18 weeks, which was obtained by taking the square root of the sum of the variances along the longest expected path from event 4310 to event 6400.

The duration of the critical path in the facility acquisition network model is five years, five and one-half

months. The IOC date for the facility in this model is in June 1978, given the network start date as January 1973.

Turning now to the amount of change in individual activities, the variance for all but eight activities in the facilities network is less than one week. The maximum individual activity variance is 3.61 week<sup>2</sup> for the POM preparation by HQ USAF. Interestingly, the complete project book preparation variance is close to this maximum at 2.89 week<sup>2</sup>. The facility construction variance is 1.69 week<sup>2</sup>, as is the variance in collecting comments from the preliminary design conference. The programming phase of the facility acquisition process contains the most variance in individual activities. As can be seen from the critical path, any change in the programming phase directly impacts the critical path and the total project duration.

The probability of individual activities being accomplished by the scheduled date (or the latest allowed date if a scheduled date is not specified) is also of interest in the facility acquisition network. The probability for each activity along the critical path is .50, while the probability of accomplishment for those activities with slack increases commensurate with the amount of slack available, up to a maximum probability of .99. There is no probability given in the stand-alone facility acquisition network model of less than .50.

One further point about the probabilities of individual activities. For those activities on the critical path

and for which a required or scheduled date has been specified, the expected date for accomplishment of that activity occurs sufficiently before the required or scheduled date to allow a .99 probability of completion. This implies that the required or scheduled dates may have excess slack "built-in" beyond what is necessary for any single project. However, it must also be recognized that in any given fiscal year program, there are many hundreds of projects submitted and all are processed and reviewed subject to the same required and scheduled date constraints.

A probability distribution for the facility acquisition network as a whole is shown in Figure 6. This distribution is for the time duration from when the requirement is identified until the facility is complete and ready for use, including the installation and checkout of any required equipment. Also, it is predicated upon the same assumptions applicable to the facility acquisition model development. The distribution in Figure 6 was determined by summing the expected activity duration values ( $t_e$ ) of individual activities along the critical path of the facility acquisition network to determine  $\bar{X}$ , and using the formula:

$$\sigma_{T_E} = \sqrt{\sum (\sigma_{t_e})^2}$$

where  $\sigma_{T_E}$  is the standard deviation of the network as a whole and  $(\sigma_{t_e})^2$  is the variance for each individual activity along the critical path. The values of  $T_E$  and  $(\sigma_{t_e})$  for each

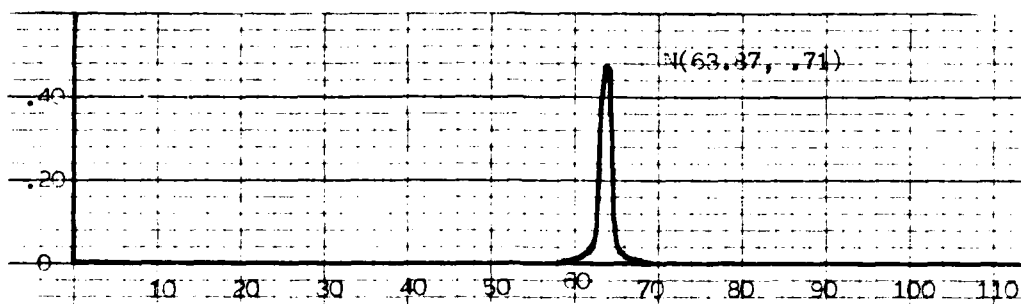


Figure 6

Facility Acquisition Process  
Probability Distribution

activity in the network are shown in Appendix D.

Weapons System Acquisition Network  
Model Analysis

The computer-generated portion of the analysis of the weapons system acquisition network model is given in Appendix E. The discussion and analysis of the weapons system acquisition network, as with the facility acquisition network, is based on that computer analysis. Again, only salient elements of the detailed analysis of Appendix E will be addressed. The reader is again referred to Appendix E for the detailed calculations for each activity and event in the weapons system acquisition network.

As with the facility acquisition model, only the initial network start event was specified in the analysis as an accomplished date. All other dates in the analysis were calculated as expected dates. The expected dates shown in Appendix E are, in fact, close approximations to the actual

dates that that event or activity was accomplished, but because the computer program used for analysis was not designed to analyze already completed activities and events, it was necessary to modify the way the data were input and not denote them as actual dates to allow eventual analysis of the integrated network. Thus, the dates specified as the expected dates are, in fact, close approximations to the actual dates, even though they are not so annotated in the computer-generated output.

The designated network start date was October 10, 1969, which is the date the Secretary of the Air Force redesignated the program into a competitive prototyping strategy.

Figure 7 shows the network logic diagram for the A-10 system development, as constructed from the activities and events of Appendix B. Again, the critical path is shown by a doubled activity line. As with Figure 5, only event numbers are shown in the logic diagram, and these must be cross-referenced with Appendix B to determine activity and event descriptions.

The duration of the critical path in the weapons system acquisition network is eight years, given the start date already noted, with the IOC declared for the A-10 in mid-October, 1977. Another important date to note is the date of the decision to proceed into full-scale development, January 1973. This is the same month that was used as the start date for the stand-alone facility acquisition network.

The critical path involves the PMD development and finalization, DSARC I, the selection and fabrication of the



competing prototypes, the flyoff and evaluation of the prototypes, the DSARC II to the final prototype selection. In the FSD phase, the critical path follows through contract award, into tool planning, design, and manufacture for the pre-production prototypes, and into final assembly and construction of the pre-production prototypes. After the DSARC IIIA decision for initial production, the critical path continues through aircraft production and on to equipping test and training units, then equipping the first operational unit to meet the IOC.

Prior to the award of the FSD contract, all activity slacks are very close to zero, and thus even small changes in activity durations could alter the critical path.

After the award of the FSD contract, there are many activity paths that have little slack and could change the critical path if there are excessive delays or rework required. Among them are the release of specifications for vendor-supplied items, the finalization of the aircraft design, including the release of structural drawings and the design of jigs and final plans. Other activity paths with little slack include the gun and avionics testing, as well as the contract monitoring and planning that is done by the SPO. Finally, the initial aircraft delivery, test and DT&E, and initial operational cadre training are also very close to the critical path and could force it to change with any significant delays in any of these activities.

It must be noted that the description of the



sensitivity of alternative paths through the network to becoming the critical path is somewhat tenuous because actual dates are used. In some of these "near critical" paths, the durations for individual activities could have been intentionally lengthened up to the available time for their completion. If this is true, the calculated slack values are questionable.

Because the variance for individual activities in the weapons system acquisition network were not computed, the sensitivity of individual activities to change is impossible to determine.

Figures 4a, 4b, and 4c presented in Chapter 3 show the estimated overall probability distribution for total development times of fighter and attack weapons systems developed in the recent past.

#### Integrated Acquisition System Model Analysis

The facility acquisition network probability distribution shown in Figure 6, when compared with the distribution for the weapons system shown by Figure 4c, offers a convenient starting point for analysis of the integrated acquisition system. But since the facility acquisition network probability distribution of Figure 6 was based on the requirement identification at base level as its starting point, it does not share the same starting milestone as does Figure 4c, the weapons system process probability distribution from FSD to IOC. The facility acquisition process can be expanded to begin at the FSD decision point, however, by adding one

integrating activity and determining the optimistic and pessimistic time estimates for the time interval between the decision to proceed into full-scale development and the actual contract award for FSD pre-production prototypes. This was done by adding the contractor preparation of the facility requirements report activity and by having an expert in weapons system development provide estimates for the optimistic and pessimistic times for activity 10410-10420, the final contract negotiations between the announcement of the FSD decision and the competition winner and the signature of the FSD contract with the winner (21). (The three time estimates for these two activities are shown in Appendix C.) The resulting probability distribution for the facility acquisition process starting from the FSD decision is shown in Figure 8.

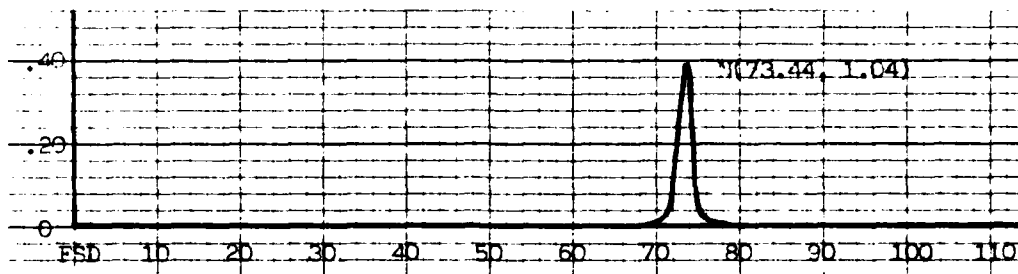


Figure 8

Amended Facility Acquisition Process  
Probability Distribution

When Figure 4c is overlaid on Figure 8, as is shown in Figure 9, the difference between the expected durations of the two acquisition processes is apparent, and it is evident

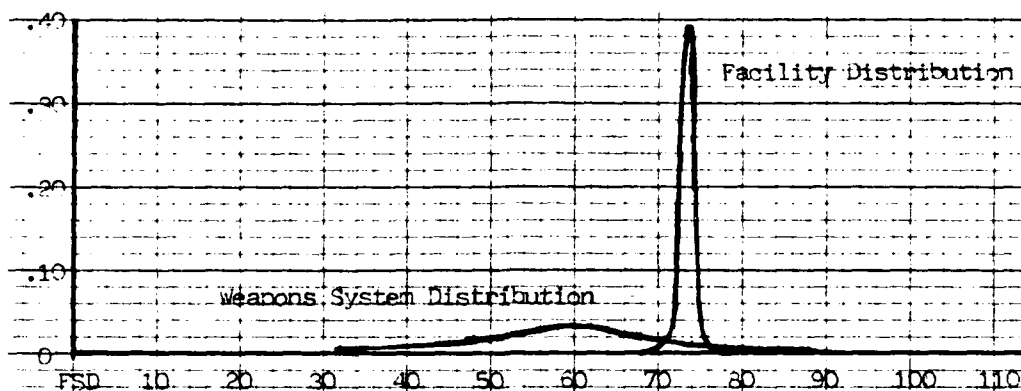


Figure 9

#### Comparative Probability Distributions

that the two processes are not synchronous. Figure 9 shows that the facility acquisition process, under normal procedures when funding is obtained through the MCP, is not compatible with the weapons system acquisition process if both have to meet a common IOC.

But the question then arises as to what activities can be crashed or otherwise amended so as to make the two processes' probability distributions more synchronous? A detailed discussion of the answer to this question will be deferred to the next chapter, but the integrated acquisition system network, using the A-10 as the representative system for the weapons system acquisition process under a competitive prototyping strategy, can allow investigation into what can be done. First it is necessary to investigate the integrated network as it results from the combining of the facilities acquisition network and the weapons system acquisition

network when no special actions on any activities or events are allowed.

A computer analysis of the integrated network is included in Appendix F. Three separate analyses of the integrated network were performed to assess the influence of the required and scheduled dates inherent in the facility acquisition process procedures. These will be discussed in more depth below.

First, it is necessary to discuss the integrating activities between the facilities acquisition process and the weapons system acquisition process. There are essentially four areas where the two processes interface directly, the first being the contractual requirement of the weapons system prime contractor to supply a facility requirements report identifying the real property facility requirements needed to support the new weapons system entering FSD. This report is normally initially required 180 days after the FSD contract is awarded, and is periodically updated to reflect weapon system design refinements that change facility requirements.

The second main interface between the two acquisition processes reflects the fact that the weapons system design must be finalized before the supporting facility design can be finalized.

Third, the site activation task force (SATAF) facilities sub-committee works concurrently with base, MAJCOM, AFRCE, and SPO personnel to minimize problems in the final stages of facility construction and equipment installation to insure

that all constituent elements necessary to become operationally capable come together at the same time. The SATAF facilities subcommittee is a controlling and coordinating body organized to facilitate a smoother weapon system beddown.

The fourth and final interface is related to a basic assumption of this study, and that is that the facility must be usable before the operational unit can be considered to have reached an initial operational capability.

A logic diagram for the integrated acquisition process is shown in Figure 10. The integrating activities, in the order they were described above, are 10420-100, 10500-6000 (the black square denotes the activity arrow has been broken and is continued elsewhere), 11310-2900, and 3500-11300. The critical path for the integrated network is shown by the doubled activity lines, and was the same path in all three analyses completed. The time duration characteristics of the three analyses differed significantly, however, and need to be addressed separately and in more detail.

The first analysis, included as Appendix F, was based on the facility acquisition network model, including all required and scheduled dates as given in the stand-alone facility acquisition network model. Two significant results are shown by this analysis. The first is that the duration of the critical path, based on the same start date used in the stand-alone weapons system acquisition model analysis, has increased the expected date of the IOC to late February 1979, an increase of one year and four months from the IOC in the

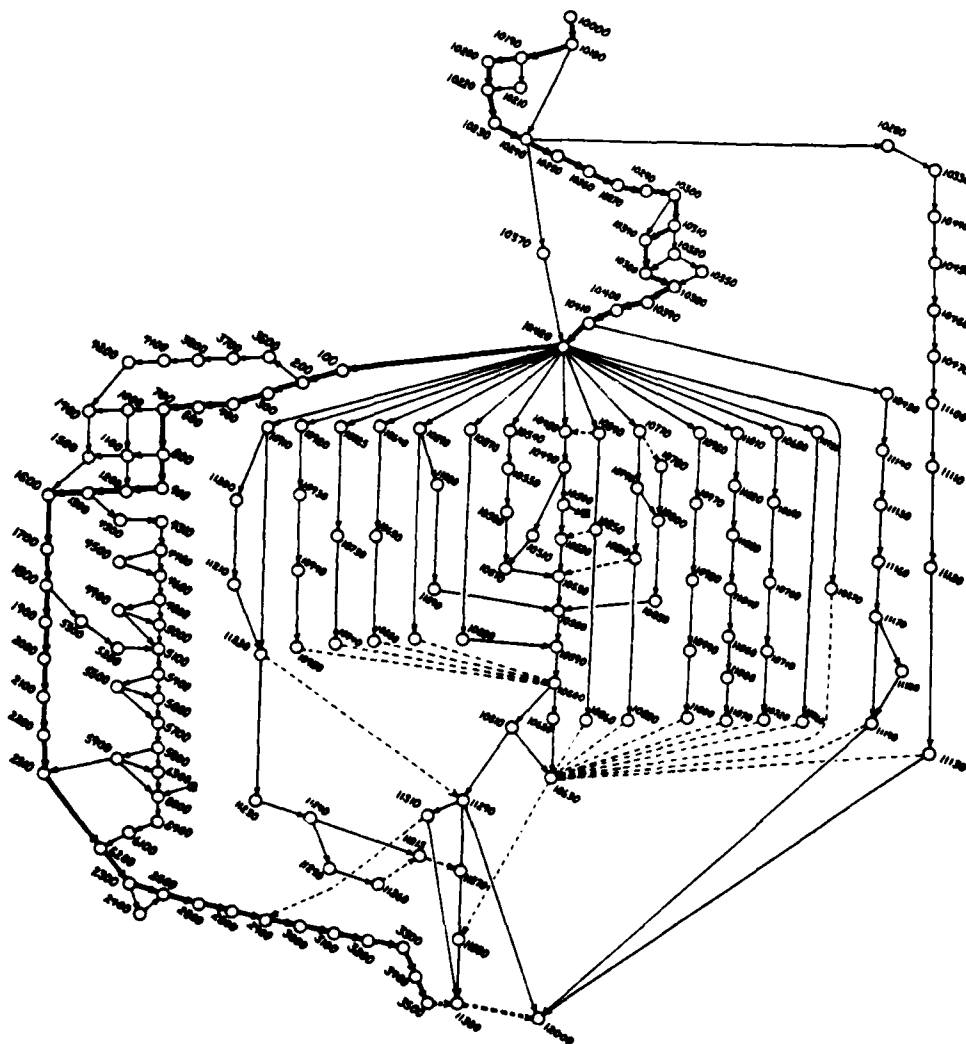


Figure 10

Integrated Acquisition Processes Logic Diagram

NOTE: The black square indicates the activity line has been interrupted for that activity and it is continued where the other black square is located.

stand-alone weapons system acquisition network model.

The second significant result is the negative slack calculated for all activities on the critical path, or even fairly close to it, prior to the required date the MCP program for the facility acquisition is sent to Congress. A negative slack means the latest allowable date for completion of an activity is before the expected date for completion of the same activity. Put another way, it means that the activity should be completed before it can reasonably be expected to be completed. In this case, the maximum negative slack has a value of -27.8 weeks, or approximately six months, and occurs for each activity on the critical path prior to event 1700, MCP program submission to Congress. This large negative slack infers that either the events prior to when the MCP program is sent to Congress should be initiated six months earlier or the fiscal year program in which the facilities are to be acquired should be moved back one year, in this case from FY 1975 to FY 1976. Moving the program back will necessarily delay the IOC by six more months, however, since the program submission to Congress is on the critical path.

The sensitivity of the critical path in this integrated network analysis is essentially the same as that in each stand-alone network previously discussed, except at the juncture where the facilities subnetwork breaks off from the weapons system subnetwork. The slack prior to event 10420, FSD contract award, is -27.8 weeks along the critical path. After event 10420, and within the weapons system subnetwork,

the lowest slack is 68.4 weeks.

Clearly the facility acquisition process is a binding constraint when new facilities are required before a weapons system can be declared operationally capable.

Finally, it is worthwhile to note that for those activities prior to MCP program submission to Congress and on the critical path, the probability of each activity on the critical path being completed by the required date is approximately .01.

The second integrated activity network analysis was based on the same input data as that included for the analysis described above, except that only the date the MCP program was sent to Congress was retained as a required date. The constraints on all other required dates as specified in the stand-alone facilities acquisition analysis were relaxed, since for some special, high priority requirements, these time constraints can be waived.

Essentially the same findings as those presented in the preceding analysis were revealed. The only difference was that the most negative slack was reduced to -24.4 weeks. The total duration and route of the critical path was not reduced or changed, and there was only 3.4 weeks reduction in the sensitivity of any paths through the weapons system acquisition subnetwork becoming part of the critical path.

The third integrated activity network analysis used the same input data as the first integrated analysis, but eliminated any required or scheduled dates. This was done



solely to allow analysis of an unconstrained acquisition process to identify any significant changes and does not reflect a real situation or real conditions. Again the same critical path, and the same total duration of the critical path was found as in the previous two analyses. The negative slack was eliminated, and all activities on the critical path that had had a negative slack had a different latest allowable date calculated. The expected and latest allowable dates for MCP program submittal to Congress, for instance, occurred in July 1975, which was six months out of phase with the actual requirement as has been previously noted.

Under all three analyses, the "tie-in" points of the interface activities was not changed, and no possibility of activity crashing was input into the computer analyses. This posture was maintained to provide as realistic a picture as possible of the way the normal structure and procedure of the acquisition processes now are designed to interface with each other.

The analysis of the acquisition networks in this chapter has shown the incompatibility between the normal procedure of the facilities acquisition process and the weapons system acquisition process. The next chapter will examine how that incompatibility is currently resolved, and analyze some other alternatives for resolving the incompatibility.

## CHAPTER 5

### ANALYSIS OF ALTERNATIVES

Acquainted now with the structure, time duration, and other characteristics of the facility acquisition model, the weapons system acquisition model, and the integrated systems model, it is worthwhile to examine some alternative means whereby the IOC for facility completion in the integrated model can be made essentially equivalent to the IOC in the stand-alone weapons system acquisition model. This involves either a compression or re-orientation of the facilities acquisition model (based on the assumption that the weapons system is to be operationally capable as soon as possible), because the critical path in the integrated model proceeds through the facility acquisition model subnetwork and extends the IOC beyond what actually occurred.

Essentially, there are three basic alternatives available to make the expected duration through the facility acquisition process equal to the expected duration from FSD start to IOC in the weapons system acquisition process. The first alternative, and the one currently employed, is to crash activities in the facility acquisition network. A second alternative is to restructure the integration points between the facility acquisition process and the weapons system acquisition process. This alternative also implies some

restructuring of the facility acquisition process. The third alternative is to completely restructure the facility acquisition process and make it subordinated to, and under the control of, the weapons system program manager.

The first two alternatives will be discussed in further detail, but the third alternative listed is beyond the scope of this study, since it involves very strong political interests as reflected in the close Congressional control exerted over the military construction program. Also, there are many facility construction projects funded through the MCP that are not tied to any particular weapons system bed-down.

#### Crashing the Facility Acquisition Process Model

This analysis will show how the facility acquisition subnetwork must be compressed, or crashed, to allow the IOC established in the stand-alone weapons system acquisition model to be achieved in the integrated acquisition model.

Before discussing the crashed facility acquisition network model, it is necessary to discuss briefly the approach used to define crashed activities. "Crashing" involves developing a new plan, one in which the assumed work pace is accelerated. This is accomplished by procuring added equipment and more personnel, working overtime, scheduling concurrently whenever possible, etc. Crashing an activity generates a new and different probability distribution from the beta

distribution for an uncrashed activity. For analytical purposes in this study, however, the expected value of the crashed activity distribution has been assumed to be equal to the most optimistic time estimate given in the beta distribution for an uncrashed activity. This assumption was made because the crashed activity distribution was not available for each activity in the facility acquisition network.

The first step in crashing the facility acquisition process, for this analysis, involved crashing all activity times for events along the critical path of the facilities acquisition subnetwork, to the most optimistic completion time as given by the three time estimates defining the beta distribution for each activity. Even this crashing did not reduce the total duration of the facilities acquisition process sufficiently to allow either the program to be presented to Congress by the required date or for the facility to be ready for use by the required IOC. Further crashing was necessary in both the programming phase and in the construction phase.

Specifically, in the programming and approval phase of the facility acquisition process, the only truly firm required date is the date the program is sent to Congress. According to one source on the HQ USAF staff, new programs can be submitted to HQ USAF as late as December and have them included in the January budget submission that goes to Congress. However, the program must be in the POM, and must be coordinated with all other funding accounts (18). Also according to the same source, such severe compression of the normal

headquarters review and selection process is not uncommon for high priority facility projects, such as those associated with a new weapons system beddown.

Not only must activities prior to submission of the program to Congress be extraordinarily crashed, but activities in the construction phase, especially the facility construction itself, must be extraordinarily crashed. Extraordinary crashing refers to a crash time that is less than the optimistic time estimate from the beta distribution for an uncrashed activity. This extraordinary crashing is done in the construction phase through contractual requirements, but adds costs that the building contractor passes on the government in his bid price (23).

The result of crashing the critical path in the facilities subnetwork, and of extraordinary crashing elements of the programming and construction phases, is shown in Figure 11, a revised logic diagram for the facilities acquisition subnetwork, and are tabulated for each activity in the integrated network in Appendix G.

As can be seen from Figure 11, where all the critical paths are shown by doubled activity lines, the result of all this crashing is a network with multiple critical paths. While the generation of multiple critical paths reduces the total process duration, it also increases management complexity. Further, slippage along any of the critical paths will delay the whole process. Multiple critical paths also serve to diffuse management attention over many simultaneous

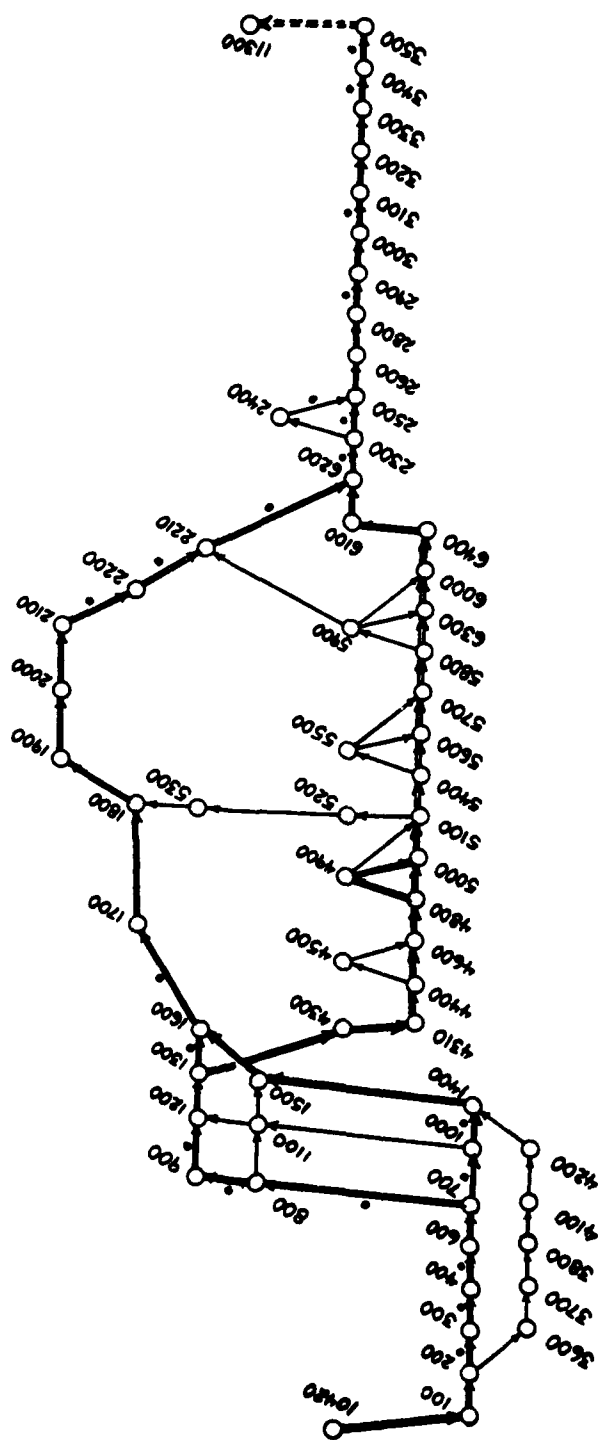


Figure 11  
Facilities Acquisition Subnetwork Revised Logic Diagram  
NOTE: A dot above the activity line denotes crashed activities.

activities, instead of allowing management to focus on a few key specific activities along one critical path. In effect, multiple critical paths takes away from management the option of management by exception (4:19).

There is also higher risk, and the associated higher cost, inherent in multiple crashed critical paths. The opportunity is greater for some important function or activity to be less than the best product in order to meet the rigorous schedule demands. For facility projects, this equates to a higher risk of inadequate programming, higher risk of lost or incomplete design, and higher risk of insufficient funding level estimates and funding appropriations.

As mentioned earlier, crashing activities is the method of facility acquisition process compression used now. All of the hazards associated with this approach, as mentioned above, have been experienced in actual practice (23). Crashing activities in the facilities acquisition process was the method employed in meeting the A-10 IOC.

#### Restructure Integration Points

The second option for compressing the facility acquisition process is to restructure the integration points between the weapons system acquisition process and the facility acquisition process. To analyze this option, it is first necessary to more fully understand the facility acquisition process programming phase.

The facility acquisition process programming phase

has two essential functions. The first function, accomplished through the initial DD Form 1391 submission, is to provide a line item input into higher command level budget planning. This input is used to allow the MAJCOMs and HQ USAF an opportunity to initially review and select from among the projects submitted those that will be supported for that fiscal year MCP program. For high priority projects, such as new weapons system beddowns, the initial DD Form 1391 submittal establishes a budget planning figure for development of the POM, and it serves as the paperwork record in high level reviews.

The second input from base level in the programming phase is the abbreviated project book. This document further refines the facility construction cost estimates and provides further information for review to allow final selection of those projects that will be supported further through the process.

The final base-level product from the programming phase is the complete project book (PB). This document provides detailed cost estimates, and all baseline information from which to develop the facility design. It also serves as the final document in the higher headquarters review and approval process, especially before Congress.

Essentially, however, the first two documents serve as inputs for review, approval, and selection of projects that will be included in the POM. The last document serves as the baseline for design, and for support of those projects in the POM that are being defended before Congress for authorization

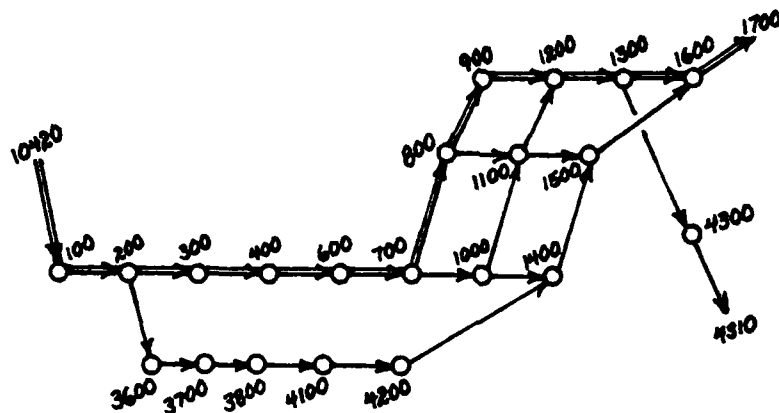


and funding.

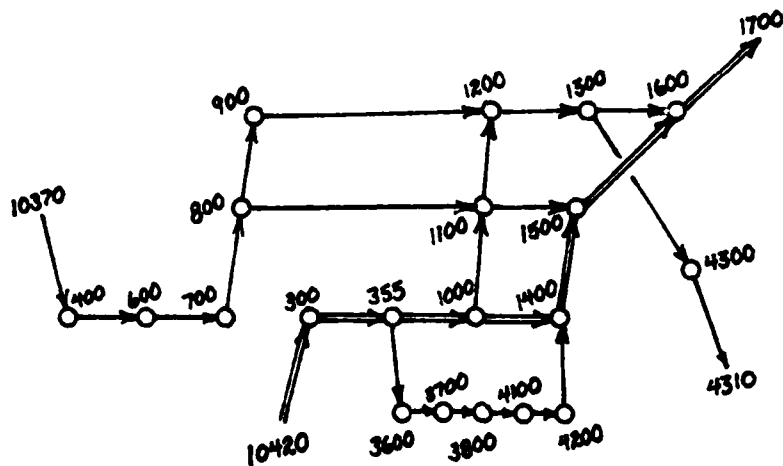
The option for restructuring and "tie-in" points of the integrating activities between the two acquisition processes stems from the fact that the first programming document, the initial DD Form 1391 submittal is not dependent on receipt of the facilities requirements report developed by the weapon system prime contractor. What is needed is notification of the intent to beddown a weapons system at a particular base, so that that base can generate an initial DD Form 1391 input to establish the requirement in the POM. The initial estimate of the amount of money necessary for the facility support of the weapons system beddown need not be precisely accurate since it can be refined with inputs from the later programming documents and finalized before the whole MCP program is submitted to Congress.

Figure 12 shows the original and an amended subnetwork of the programming phase of the integrated acquisition network. The location of the critical path of the whole integrated acquisition network as it passes through each of these subnetworks is shown by the doubled activity line. The computer analysis of each activity in the integrated acquisition network, when it is restructured as shown in Figure 12b is also included as Appendix H.

In the structure shown by Figure 12b, notification of intent to beddown a weapons system would be made concurrent with the SPO's direction to competing contractors concerning the requirements of the full-scale development phase. This



a. Original Programming Phase Subnetwork



b. Amehded Programming Phase Subnetowrk

Figure 12  
Programming Phase Subnetworks

early notification would allow early submittal of the initial DD Form 1391, and get the construction program (although not the specific required amount) identified as early as possible in the POM. If the operating command for the weapons system had not yet designated an initial host base, the MAJCOM could initiate DD Form 1391 to insure the program inclusion in the POM.

Some rearrangement of activities from the way they exist in Figure 12a is shown by Figure 12b, but no essential activities have been eliminated. They have only been re-sequenced in a different structure. The computer analysis of this amended structure shows that without crashing any of the programming phase activities, there is only seven weeks of negative slack in the network. All negative slack could be eliminated by crashing the abbreviated and complete project book preparation activities, and even then they would not have to be crashed beyond a time duration equal to the most optimistic completion time for the uncrashed activity.

This network structure also results in only one critical path, allowing management to focus control more precisely and permitting management by exception.

The network structure shown by Figure 12b does not preclude the crashing or extraordinary crashing of activities in the construction phase. It does provide some valuable slack in the design phase, however. Finally, the network structure of Figure 12b still provides the opportunity to stop the facility support project in support of the weapons system

beddown if the weapons system development does not proceed into full-scale development or does not proceed into production.

The structure of the logic diagram of Figure 12b represents only one possibility for relocating the "tie-in" points for integrating activities between the two acquisition subnetworks. Five other possible integrating structures for the programming phase of the network were examined, but they all resulted in more negative slack or required crashing more activities than the one shown, and were thus considered less acceptable than that shown by Figure 12b. This is not to imply that the modified structure shown in Figure 12b is the optimum one possible. More "what if" type analyses of different structural arrangements is necessary to determine the optimal structure that will meet requirements. What is shown is that restructuring can effect better management procedures than the present method of crashing allows.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

The development and analysis of the facility acquisition process and the weapons system acquisition process has been accomplished through the use of PERT networks developed for each process. From the analysis of the stand-alone acquisition processes, an analysis of the compatibility of the two processes was accomplished.

The first steps in the analysis consisted of developing probability distributions for each acquisition process, as they are normally structured and occur. Comparison between the probability distributions showed a marked expected time duration difference between the two acquisition processes, with the expected value of the facility acquisition process being many months longer than the expected value of the weapons system acquisition process, when both are measured from the decision to proceed into full-scale development. (The difference between means is 13 months.)

The second step in the analysis used the network models developed for each acquisition process as inputs into an integrated acquisition process model. This permitted the specific requirements of each subordinate acquisition process to be analyzed in the context of how it impacted the acquisition process as a whole. The integrated network also allowed

analysis of how the two subordinate acquisition processes might be restructured, or their integration structure reoriented to more acceptably meet the time constraints imposed on the whole system.

### Conclusions

From this analysis, it was determined that the facility acquisition process is very likely to be a binding constraint on the initial operational capability date established for a new weapons system development. The normal procedures and time tables used in the facility acquisition process are not conducive to meeting the targeted IOC. Instead, extraordinary management action is required to crash activities in the facility acquisition process, to the point where almost all activities in the facilities acquisition process become critical.

Restructuring the interface activities between the facility acquisition process and the weapons system acquisition process was examined with a view to establishing different "tie-in" points between the two processes. Analysis of this restructuring showed that it can reduce the amount of crashing required in the facility acquisition process, thus reducing extraordinary management control and saving resources. An example of a restructured network was shown in Figure 12b of Chapter 5.

### Recommendations

While the structure of the facilities acquisition process in support of new weapons system beddowns shown in

Figure 12 may not be optimal, it does illustrate that restructuring the process can achieve economies of time and other resources. More study into the relocation of integrating activities between the two acquisition processes is necessary, and this research should be pursued. The benefits possible from finding the optimal structure for integration include a lower risk of exceeding time constraints, lower cost, less direct management attention, and less stringent management control.

#### Recommendations for Further Study

One area requiring further study is the possible development of a generalized weapons system acquisition model that does not rely upon a particular weapons system as the basis for analysis. The case study approach, as used in this analysis by having the A-10 system as the weapons system acquisition process model, does not give generalized results that can be universally applied.

The specific problems of coordination and responsibility assignment that would be encountered by restructuring the programming phase of the facilities acquisition process need further investigation, as does determination of the optimum structure to be used.

Finally, repeated validation of the results of this study are necessary because of the subjective nature of the input data used as the foundation of this study. Subjective judgments of time estimates could have inherent biases built

in that could be eliminated only by repeating the study and acquiring inputs for time estimates from different sources than were used in this study.



APPENDIX A  
FACILITY ACQUISITION MODEL INPUT DATA

### Activities Input Data

Note: Times are given in weeks and days format.

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
99	100	Dummy Network Start	0	0	0
100	200	Facility Requirements Sent to Base	3	5	10
200	300	Facility Survey	42	42	60
200	3600	Initial Environmental Evaluation	26	42	63
300	400	Construction Program Determination	34	42	55
400	600	Initial Documentation Development	5	26	55
600	700	Initial DD Form 1391 Development	3	5	10
700	800	1391 Receipt and Review by MAJCOM	42	63	84
700	1000	Abbreviated PB Development	142	171	213
800	900	Program Amendment & Forward to HQ USAF	84	105	121
900	1200	Program Review by HQ USAF	105	126	171
1200	1300	Approved Program Selection by HQ USAF	21	26	42
1300	1600	POM Establishment by HQ USAF	171	213	284
800	1100	MAJCOM Review of 1391	26	42	55
1100	1500	MAJCOM Review of Abbreviated PB	105	126	150
1000	1100	Abbreviated PB Mailed to MAJCOM	3	5	10
1000	1400	Complete PB Preparation	213	255	321
1400	1500	Complete PB Mailed to MAJCOM	3	5	10
1500	1600	Complete PB Review & Mail to HQ USAF	34	42	55
1600	1700	HQ USAF Review of Program	60	80	120
1700	1800	OSD & OMB Review of Program	100	140	160
1800	1900	Program Sent to Congress	3	5	10
1900	2000	Congressional Review & Approval	350	360	380
2000	2100	Bills Signed by the President	1	3	10
2100	2200	OMB Apportions Funds to AFRCE	13	26	55
2200	2210	HQ USAF Apportions Funds to AFRCE	13	26	55
2210	6200	Financial Planning	30	50	80
6200	2300	IFB Preparation	13	42	55
2300	2400	CWE Preparation	10	13	21

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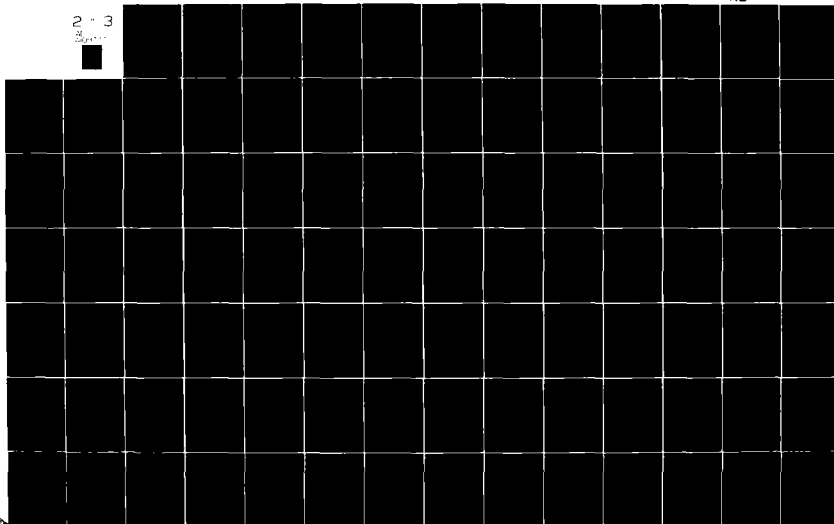
AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL--ETC F/G 5/1  
A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION I--ETC(U)  
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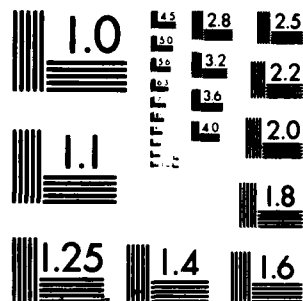
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MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963-A

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
2400	2500	Preparation for Award	26	42	42
2300	2500	Bid Advertisement, Formula- tion & Receipt	50	63	63
2500	2600	Bids Opened, Reviewed & Approved	3	5	13
2600	2800	Preconstruction Conference Preparation	11	13	21
2800	2900	Facility Construction	1000	1030	1080
2900	3000	Prefinal Inspection	5	5	5
3000	3100	Correct Inspection Deficiencies	42	63	84
3100	3200	Final Inspection	1	1	1
3200	3300	Facility Transfer	4	4	13
3300	3400	Equipment Installation	42	63	84
3400	3500	Facility & Equip. Checkout	26	42	50
3600	3700	Env. Assessment & FONSI Determination	30	45	60
3700	3800	EA Presentation to Base EPC	1	1	1
3800	4100	Base JAG & PA Review FONSI	30	40	50
4100	4200	FONSI Publish & Solicit Public Comments	42	50	60
4200	1400	Complete Programming Docu- ments	3	5	13
1300	4300	DI Issue to MAJCOM/AFRCE	1	1	1
4300	4310	MAJCOM/AFRCE Notify Design Agent	5	5	13
4310	4400	DA Preparation for Predesign Conference	10	13	21
4400	4500	MAJCOM/AFRCE Collects & Reviews Comments	35	40	50
4400	4600	Conceptual Design	50	60	90
4500	4600	Relay Comments to DA	3	5	10
4600	4800	Early Preliminary Design	100	120	140
4800	4900	MAJCOM/AFRCE Collect & Review Comments	35	40	50
4800	5000	Preliminary Design	30	40	60
4900	5000	Relay Comments to DA	3	5	10
4900	5100	Prep for Early Prelim Design Conference	15	20	30
5000	5100	Early Prelim Design Continues	20	30	40
5100	5200	35% Design Notification to MAJCOM	1	1	1
5200	5300	35% Design Notification to HQ USAF	1	1	1
5300	1800	35% Design Notification to OSD	3	3	3
5100	5400	Early Prelim Design Confer- ence	60	80	140
5400	5500	MAJCOM/AFRCE Collect & Review Comments	35	40	50

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
5400	5600	Final Design	60	80	100
5500	5600	Relay Comments to DA	3	5	10
5500	5700	Prep for Prelim Design Conf.	15	20	30
5600	5700	Prelim Design Continues	20	30	40
5700	5800	Prelim Design Conf Comments	60	100	120
		Incorp.			
5800	5900	MAJCOM/AFRCE Collect & Review Comments	35	40	50
5900	6000	Prep for Final Design Conf	15	20	30
5900	2210	95% Design Notification to HQ USAF	5	5	5
5800	6300	Final Design Details	26	42	63
5900	6300	Relay Comments to DA	3	5	10
6300	6000	Final Design Continues	15	20	30
6000	6400	Final Design Comment Incorp	26	42	63
6400	6100	Final Design Review by MAJCOM/AFRCE	13	26	55
6100	6200	Contract Preparation	21	26	42

#### Event Input Data

Event Number	Description	Date Required (month,day,year)
99	Dummy Start Event	
100	Facility Requirements Defined by Contractor	
200	Base Receives Facility Requirements Report	
300	Facility Survey Complete	
400	Base Facilities Board Approves Facilities Construction	
600	Call Received from MAJCOM	
700	Initial DD Form 1391 Completed	
800	Initial DD Form 1391 Received by MAJCOM	080173
900	Initial Program Received by HQ USAF	101573
1000	Abbreviated Project Book Completed	
1100	Abbreviated PB Received by MAJCOM	120173
1200	Abbreviated PB Received by HQ USAF	
1300	DI Issued by HQ USAF	
1400	Full PB Review Complete	
1500	Full PB Submitted to MAJCOM	070174
1600	Full PB Submitted to HQ USAF	080174
1700	MCP Program Submitted to OSD	100174
1800	OSD/OMB Review Complete	
1900	MCP Program Submitted to Congress	011575
2000	Congress Passed MCP Bill	
2100	President Signs MCP Bill	
2200	Funds Apportioned by OMB	

Event Number	Description
2210	Funds Apportioned by HQ USAF
2300	IFB Ready
2400	CWE Prepared
2500	Construction Bids Prepared
2600	Contract Awarded
2800	Preconstruction Conference Complete
2900	Facility Constructed
3000	Prefinal Inspection Complete
3100	Deficiencies Corrected
3200	Final Inspection Complete
3300	Facility Transfer Complete
3400	Equipment Installation Complete
3500	Facility Ready for Use
3600	CATEX Inapplicability Confirmed
3700	Environmental Assessment Complete
3800	Base EPC Approved EA
4100	FONSI Review Complete
4200	Public Comment Period Complete
4300	DI Issued to MAJCOM/AFRCE
4400	Pre-design Conference Complete
4500	Comments on Pre-design Collected
4600	DA Received Comments
4800	Early Preliminary Design Review Complete
4900	Preliminary Design Comments Collected
5000	DA Received Comments
5100	Early Preliminary Design Conference Complete
5200	35% Design Report Submitted to AFRCE
5300	35% Design Report Submitted to HQ USAF
5400	Preliminary Design Review Complete
5500	Comments Collected
5600	DA Received Comments
5700	Preliminary Design Conference Complete
5800	Final Design Review Complete
5900	Comments Collected
6000	Final Design Conference Complete
6100	Final Design Approved
6200	MAJCOM/AFRCE Contract Review Complete
6300	DA Receives Comments
6400	Design Complete

APPENDIX B  
WEAPONS SYSTEM ACQUISITION MODEL INPUT DATA



### Activities Input Data

Note: Time is given in weeks and days format.

Begin Event	End Event	Description	Time Value
10000	10180	Dummy Network Start	0
10180	10190	Prepare Revised Draft DCP	83
10190	10200	Prepare for DSARC Review of Strategy	4
10200	10220	Ratification of Recommendation by Decision Authority	153
10190	10210	Final DCP Preparation	130
10210	10220	Final DCP Approval	30
10220	10230	PMD Finalization	4
10230	10240	Program Control Formulation	13
10180	10240	Continue Baseline Preparation & Analysis	262
10240	10250	Finalize RFP	14
10250	10260	Industry Prepares Reply to RFP	133
10260	10270	Industry Reply Evaluation	94
10270	10290	Final Prototype Source Selection Evaluation	66
10290	10300	DSARC I Review & Selection	1
10300	10310	Final Contract Preparation	4
10310	10320	Prototype Engineering	86
10320	10350	Prototype Fabrication & Manufacture A-10	622
10320	10360	Prototype Fabrication & Manufacture A-9	651
10350	10380	A-10 Prototype Flight Evaluation	206
10360	10380	A-9 Prototype Flight Evaluation	180
10300	10340	A-9 Engine Contract Development	542
10310	10340	A-9 Engine Contract Negotiations	545
10340	10360	A-9 Engine Fabrication & Test	202
10380	10390	Air Force Competitive Flyoff	64
10390	10400	Flyoff Results Evaluation	54
10400	10410	Review & Ratification by Source Selection Authority	1
10410	10420	FSD Contract Preparation & Negotiation	60
10410	10430	Engines Contract Preparation & Negotiation	60
10240	10370	Baseline Data Preparation & Planning	1132
10370	10420	Basic Contract Development & Planning	290
10240	10280	Gun RFP Preparation	163
10280	10330	Industry Reply Formulation & Evaluation	345
10330	10440	Gun Prototype Fabrication & Manufacture	841
10440	10450	Gun Competitive Flyoff	134
10450	10460	Gun Competitive Flyoff Evaluation & Selec.	84
10460	10470	Final Contract Preparation & Negotiation	10
10470	11100	Preliminary Modification to Gun Design	76
11100	11120	Preproduction Gun Fabrication	153
11110	11120	Finalize Gun Design	414

Begin Event	End Event	Description	Time Value
11120	11130	Test & Quality Gun	213
11130	10630	--Dummy--	0
10430	11140	Preliminary Modification to Engine Design	43
11140	11150	Finalize Engine Design	111
11150	11160	Preliminary Engine Testing	385
11160	11170	Engine Qualification Testing	163
11170	11180	Preproduction Engine Fabrication	43
11180	11190	Preproduction Engine Testing	84
11190	10630	--Dummy--	0
11170	11190	Engine Qualification Testing	120
11130	12000	Continuing Gun Production & Delivery	1200
11190	12000	Continuing Engine Production & Delivery	1200
10420	10480	Preproduction Design Modifications	93
10480	10490	Finalize Major Component Design	43
10490	10500	Finalize Design	43
10520	10530	Prepare Final Assembly Plans & Jigs	216
10510	10570	Assemble Major Components	40
10500	10520	Prepare Structural Drawings	302
10490	10510	Manufacture & Deliver Forgings	173
10420	10540	Tool Planning Design & Manufacture	182
10540	10550	Tool Release & Set-Up	42
10550	10560	Develop Manufacturing Details	42
10560	10570	Manufacture Components	174
10570	10530	Assemble Substructure	302
10530	10580	Final Assembly A/C #1	42
10580	10590	Ground Testing	84
10590	10600	Preparation for First Flight	20
10600	10610	Preproduction Aircraft Construction	423
10600	10620	Initial Aircraft Testing & Delivery	76
10620	10630	DT&E of Preproduction Aircraft	1023
10610	10630	Delivery & Test of Last Preproduction A/C	666
11270	11280	FOT&E	324
11280	11300	Initial Operational Cadre Training & Qual	315
11300	12000	--Dummy--	0
10610	11290	Manufacture Production A/C #1	13
11290	11270	IOT&E	214
11290	11310	Equip Test & Training Units	770
11310	11300	Final Preparation & Coordination	232
11290	11310	Continuing Aircraft Production	860
10420	10770	Prepare Vendor Specifications	11
10770	10790	Vendor Reply & Evaluation	50
10770	10780	--Dummy--	0
10780	10800	Prepare Vendor Contract	70
10790	10800	Final Contract Negotiations	10
10790	10810	Prepare Installation Drawings	543
10810	10530	--Dummy--	0
10810	10820	Manufacture & Test Components	106
10820	10630	--Dummy--	0
10800	10830	Manufacture & Test Components	576
10830	10580	Install Components	85

Begin Event	End Event	Description	Time Value
10420	10920	Contract Monitoring & Planning	401
10920	10930	Contract Monitoring & Planning	125
10930	10940	Contract Monitoring & Planning	43
10940	10950	Contract Monitoring & Planning	236
10950	10600	Contract Monitoring & Planning	42
10420	10960	Specification Updating	85
10960	10970	Determine Gun Interference Data	105
10970	10980	Armor Analysis	196
10980	10990	Vulnerable Area Analysis	521
10990	11000	Determine Final Gun Interference Data	302
11000	10630	--Dummy--	0
10420	11010	Prepare Training Plans	43
11010	11020	Prelim Design of Formal Maintenance Training System	130
11020	11030	Final MTS Design	220
11030	11040	Finalize MTS Design Details	170
11040	11050	MTS Planning & Design Review	105
11050	11060	MTS Fabrication	501
11060	11070	MTS Final Detailing & Delivery	43
11070	10630	--Dummy--	0
10420	10910	Initial Cost Verification	540
10910	11200	Review Preliminary FSD Data	141
11200	11210	Ratification of DSARC Recommendations	31
11210	11220	Authorize Long Lead Order	132
10910	11220	Prepare Long Lead Order #1	304
11220	11230	Prepare Long Lead Order #2	373
11230	11240	Program Cost Verification	34
11240	11215	Review of FSD Data	231
11215	11270	Ratification of DSARC Recommendations	20
11240	11250	Review of Test Data	85
11250	11260	Review of FSD Data	42
11260	11215	Preparation for DSARC Review	80
10420	10840	Determine Preliminary Design Loads	86
10840	10850	Determine Final Design Loads	351
10850	10860	Vibration & Acoustics Analysis	344
10860	10630	--Dummy--	0
10840	10480	--Dummy--	0
10850	10520	--Dummy--	0
10420	10870	Gun Location Determination	182
10870	10880	Prepare Gun Installation Drawing	432
10880	10590	Gun Groundchecks	216
10420	10890	Prepare Avionics Orders	202
10890	10900	Avionics Integration & Testing	651
10900	10600	--Dummy--	0
10890	11080	Negotiate Order	21
11080	11090	Manufacture & Deliver Avionics	391
11090	10580	Install Avionics	131
10420	10670	Conduct Static Article Tests	1181
10670	10630	--Dummy--	0
10420	10750	Miscellaneous Test Planning	20

Begin Event	End Event	Description	Time Value
10750	10760	Conduct Miscellaneous Tests	1590
10760	10630	--Dummy--	0
10420	10640	Wind Tunnel Drag Tests	105
10640	10650	Store Separation Tests	216
10650	10660	Flutter Tests	240
10660	10600	--Dummy--	0
10420	10680	Fatigue Article Test Planning	261
10680	10690	Fatigue Article Fabrication & Assembly	606
10690	10700	Fatigue Testing	344
10700	10710	Continue Fatigue Testing	216
10710	10720	Continue Fatigue Testing	261
10720	10630	--Dummy--	0
10420	10725	Egress Test Design Modifications	60
10725	10730	Egress Structural Tests	256
10730	10740	Egress Track Tests	214
10740	10600	--Dummy--	0
10630	11280	--Dummy--	0
11220	11290	--Dummy--	0

#### Event Input Data

Event Number	Description
10000	Dummy Network Start
10180	Source Selection Authority Reorients to Competitive Prototyping Strategy
10190	Revised Draft DCP Prepared
10200	DSARC Review Complete
10210	Final DCP 23A Completed
10220	DCP 23A Approved by Deputy SECDEF
10230	PMD Issued
10240	A-X SPO Fully Established
10250	RFP Issued to Industry
10260	Response to RFP Received
10270	Source Selection Advisory Committee Recommendations Briefed to Source Selection Authority
10280	RFP for Gun Issued to Industry
10290	DSARC I
10300	Contractors Selected for Competitive Prototype
10310	Authorization to Award Contract
10320	Prototypes Designated A-9 & A-10
10330	Gun Prototyping Contractors Selected
10340	A-9 Engine Contract Negotiated
10350	A-10 First Flight
10360	A-9 First Flight
10370	Proposal Instruction for FSD Released

<u>Event Number</u>	<u>Description</u>
10380	Start Air Force Flyoff
10390	Flyoff Completed
10400	DSARC II
10410	A-10 Selected for FSD
10420	Contract Award to Fairchild Republic Company for FSD
10430	Engine Contract Award to General Electric
10440	Gun Competitive Shootoff Begins
10450	Gun Competitive Shootoff Ends
10460	General Electric Selected for Gun FSD
10470	Contract Award to GE for Gun
10480	Design Layouts Complete
10490	Major Forging Release
10500	Design Freeze
10510	Receive Forgings
10520	Release Structural Drawings
10530	Structural Assembly Manufacture
10540	Tool Planning, Design & Manufacture Complete
10550	Release Tools
10560	Manufacturing Details Complete
10570	Structural Assembly Complete
10580	Final Assembly A/C #1 Complete
10590	Ground Test Complete
10600	First Flight A/C #1 (Preproduction)
10610	Deliver A/C #10 (Preproduction)
10620	Start DT&E Testing
10630	Complete DT&E Testing
10640	Complete Wind Tunnel Tests
10650	Store Separation Tests Complete
10660	Complete Flutter Tests
10670	Static Article Tests Complete
10680	Fatigue Article Test Planning Complete
10690	Final Assembly Complete
10700	One Lifetime Fatigue Testing Complete
10710	Two Lifetimes Fatigue Testing Complete
10720	Four Lifetimes Fatigue Testing Complete
10730	Egress Structural Tests Complete
10725	Egress Tests Design Modifications Complete
10740	Egress Track Tests Complete
10750	Miscellaneous Test Planning Complete
10760	Miscellaneous Tests Complete
10770	Release Vendor Specifications
10780	Issue RFQ
10790	Select Vendor
10800	Issue Purchase Order
10810	Release Installation Drawings
10820	Qualification Tests Complete
10830	Receive Components
10840	Preliminary Design Loads & Criteria Set
10850	Final Design Loads & Criteria Set
10860	Vibration & Acoustic Analysis Complete
10870	Gun Location Freeze

<u>Event Number</u>	<u>Description</u>
10880	Gun Installation Drawing Complete
10890	Avionics Long Lead Orders Released
10900	Avionics Integration & Testing Complete
10910	Design to Cost Demo Complete
10920	PDR
10930	PRR
10940	CDR
10950	Safety Inspection
10960	Specification Update
10970	Preliminary Gun Interference Data Complete
10980	Armor Analysis Complete
10990	Vulnerable Area Analysis
11000	Final Gun Interference Specifications
11010	Training Plans Complete
11020	Formal MTS Design
11030	MTS Design Freeze
11040	MTS PDR
11050	MTS CDR
11060	MTS PCA/FCA
11070	Delivery of MTS
11080	CFAE Ordered
11090	CFAE Received
11100	Gun PDR
11110	Receive Phase I Gun
11120	Gun CDR
11130	Gun Qualification Tests Complete
11140	Engine Hardware Design Complete
11150	Engine CDR
11160	AEDC Engine Exploratory Tests Complete
11170	AEDC Qualification Tests Complete
11180	Receive Engine #1
11190	MQT Approval
11200	DSARC IIIA
11210	Authorization for Initial Production
11215	DSARC IIIB
11220	Long Lead Items Option 1 Funding Point
11230	Long Lead Items Option 2 Funding Point
11240	Design to Cost Demonstration
11250	FCA
11260	PCA
11270	FOT&E Program Start
11280	FOT&E Program End (Phase I)
11290	First Production A/C Delivery
11300	Operational Unit IOC
11310	SATAF Activated
12000	Dummy Network End

APPENDIX C  
INTEGRATING ACTIVITIES

Activities Input Data

Note: Times are given in weeks and days format.

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
10420	100	Facility Requirements Re- port Generation	213	255	300
3500	11300	--Dummy--	0	0	0
11310	2900	SATAF Review & Action to Meet IOC	643	771	855
10500	6000	--Dummy--	0	0	0
(10410	10420	FSD Contract Preparation & Negotiation	1	171	255)



APPENDIX D  
FACILITY ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity ( $\sigma_{t_e}$ ) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.

The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time ( $t_e$ ) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date ( $T_E$ ) for completion of the activity.

ALLOWABLE DATE - latest allowable date ( $T_L$ ) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date ( $T_A$ ) is shown preceded by the letter A. If a required completion date has been specified, that date ( $T_R$ ) is shown preceded by the letter R.

SLACK - slack for the activity ( $T_L - T_E$ )

TIME REMAINING - time from the report date until expected completion date ( $T_E$ ) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date ( $T_E$ ) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date ( $T_L$ ) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event ( $T_A$ ).

SLACK - slack for the event ( $T_L - T_E$ )

LEGEND  
 A... DELETION OF ACTIVITY  
 R... REPLACEMENT OF ACTIVITY  
 D... DELETION OF ACTIVITY  
 ...INDICATING NO CHANGE OF ACTIVITY ON OLD MASTER FILE

UNCLASSIFIED

DATE	FILE	EVENT	ACTIVITY	ACCOUNT	FILE	STATUS	ACT	DATE
300	300	300	300	300	300	300	300	300
99	99	99	99 --BUNKY START--					
00	A	1/15/73	1					
99	99	99	99 --BUNKY START--					
100	100	100	100 FACILITY REQUIREMENTS DEFINED BY CODE					
11	11	11	11					
100	100	100	100 FACILITY REQUIREMENTS SENT TO BASE					
200	200	200	200 BASE RECEIVES FACILITY REQ REPORT					
21	21	21	21					
200	200	200	200 FACILITY SURVEY					
300	300	300	300 INITIAL ENVIRONMENTAL EVALUATION					
300	300	300	300 FACILITY SURVEY COMPLETE					
31	31	31	31					
300	300	300	300 CONSTRUCTION PROGRAM DETERMINATION					
400	400	400	400 BASE PD APPROVES FACILITY CONSTR					
41	41	41	41					
400	400	400	400 INITIAL DOCUMENTATION DEVELOPMENT					
400	400	400	400 CALL RECEIVED FROM MAJCOM					
71	71	71	71					
600	600	600	600 INITIAL PD FORM 1391 DEVELOPMENT					
700	700	700	700 INITIAL 1391 COMPLETED					
601	601	601	601					
700	700	700	700 1391 RECEIPT & REVIEW BY MAJCOM					
700	700	700	700 ABBREVIATED PROJECT BOOK DEVELOPMENT					
800	800	800	800 INITIAL PD FORM 1391 RECEIVED BY MAJCOM					
81	81	81	81					
800	800	800	800 PROGRAM AMENDMENT & FORWARDED TO HQ USAF					
800	800	800	800 MAJCOM REVIEW OF 1391					
800	800	800	800 INITIAL PROGRAM RECEIVED BY HQ USAF					
81	81	81	81					
818/15/73	818/15/73	818/15/73	818/15/73					

UNCLASSIFIED

## UNCLASSIFIED

A	300	1200 PROGRAM REVIEW BY HQ USAF	43 1P4F	120	10
A	1000	1000 ABBREVIATED PROJECT BOOK COMPLETE			
101		1 0			
A	1000	1100 ABBREVIATED PD MAILED TO NAJCON	1472	12/ 1/73	0 0
A	1000	1000 COMPLETE PD PREPARATION	947C		263 17
A	1100	1100 ABBREVIATED PD RECEIVED BY NAJCON			
111	412/ 1/73	1 0			
A	1100	1200 NAJCON REVIEW OF ABBREVIATED PD	40JCH4	4 7/ 1/74	121 0
A	1200	1200 ABBREVIATED PD RECEIVED BY HQ USAF			
121		0 0			
A	1200	1300 APPROVED PROGRAM SELECTION BY HQ USAF	43 0E4F	4 2/ 1/74	32 3
A	1300	1300 BE ISSUED BY HQ USAF			
140		0 0			
A	1300	1400 PD ESTABLISHMENT BY HQ USAF	43 0E4F		220 10
A	1300	1400 PD ISSUE TO NAJCON/AFCE	43 0E4F		2 0
A	1400	1400 FULL PD REVIEW COMPLETE			
151		0 0			
A	1400	1500 COMPLETE PD MAILED TO NAJCON	947C	4 7/ 1/74	0 0
A	1500	1500 FULL PD SUBMITTED TO NAJCON			
151	4 7/ 1/74	0 0			
A	1500	1600 COMPLETE PD REVIEW & MAIL TO HQ USAF	NAJCON	4 12/ 1/74	40 3
A	1600	1600 FULL PD SUBMITTED TO HQ USAF			
161	4 8/ 1/74	0 0			
A	1600	1700 HQ USAF REVIEW OF PROGRAM	43 0E4F	411/ 1/74	23 16
A	1700	1700 HCP PROGRAM SUBMITTED TO OSD			
171	413/ 1/74	1 0			
A	1700	1800 OSD & ONI REVIEW OF PROGRAM	303		136 10
A	1800	1800 OSD/ONI REVIEW COMPLETE			
181		0 0			
A	1800	1900 PROGRAM SENT TO CONGRESS	2046PL30	4 1/10/75	0 0
A	1900	1900 HCP PROGRAM SUBMITTED TO CONGRESS			
191	4 1/10/75	0 0			
A	1900	2000 CONGRESSIONAL REVIEW & APPROVAL	3046P40		301 0
A	2000	2000 CONGRESS PASSED HCP BILL			
201		0 0			
A	2000	2100 BILLS STOPPED BY PRESIDENT	4017CH	410/ 1/75	0 3
A	2100	2100 PRESIDENT SIGNED HCP BILLS			
211	413/ 1/75	0 0			
A	2100	2200 ONI APPORTIONS FUNDS	741		24 7

UNCLASSIFIED

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A	2200	2200 FUNDS APPORTIONED BY DND			
	231	1 1			
A	2200	2210 NO USAP APPORTIONED FUNDS TO AFCE	AFCE	34	7
A	2210	2210 FUNDS APPORTIONED BY NO USAP			
	241	1 1			
A	2210	2210 FINANCIAL PLANNING	AFCE	51	9
A	2301	2300 IFO READY			
	251	1 1			
A	2300	2400 CUE PREPARATION	AFCE	16	2
A	2300	2400 CUE ADVERTISEMENT, FORMULATION & RECEIPT	AFCE	63	2
A	2400	2400 CUE PREPARED			
	261	1 1			
A	2400	2500 PREPARATION FOR AWARD	AFCE	42	2
A	2500	2500 CONSTRUCTION BIDS PREPARED			
	271	1 1			
A	2500	2600 BIDS OPENED, REVIEWED & APPROVED	AFCE	10	1
A	2600	2600 CONTRACT AWARDED			
	291	1 1			
A	2600	2600 PRECONSTRUCTION CONF PREPARATION	AFCE	10	1
A	2600	2600 PRECONSTRUCTION CONFERENCE COMPLETE			
	311	1 1			
A	2600	2600 FACILITY CONSTRUCTION	AFCE	1000	13
A	2600	2600 FACILITY CONSTRUCTED			
	331	1 1			
A	2600	3000 PRELIMINARY INSPECTION	AFCE	10	1
A	3000	3000 PRELIMINARY INSPECTION COMPLETE			
	311	1 1			
A	3000	3100 CORRECT INSPECTION DEFICIENCIES	AFCE	66	7
A	3100	3100 DEFICIENCIES CORRECTED			
	321	1 1			
A	3100	3200 FINAL INSPECTION	AFCE	2	1
A	3200	3200 FINAL INSPECTION COMPLETE			
	331	1 1			
A	3200	3300 FACILITY TRANSFER	AFCE	5	1
A	3300	3300 FACILITY TRANSFER COMPLETE			
	341	1 1			
A	3300	3400 EQUIPMENT INSTALLATION	AFCE	66	7
A	3400	3400 EQUIPMENT INSTALLATION COMPLETE			
	351	1 1			
A	3400	3500 FACILITY AND EQUIPMENT CHECKOUT	AFCE	43	2

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A	3500	3500 FACILITY READY FOR USE			
	361	1 1			
A	3600	3600 CATER LIABILITY COMPLAINED			
	371	2 0			
A	3600	3700 ENV ASSESSMENT & FOCUS DETERMINATION	DATE	40	5
A	3700	3700 ENVIRONMENTAL ASSESSMENT COMPLETE			
	381	3 0			
A	3700	3800 EA PRESENTATION TO BASE EPC	DATE	2	0
A	3800	3800 BASE EPC APPROVED EA			
	391	3 0			
A	3800	4100 BASE JAG & PA REVIEW FOMBI	DATE	40	2
A	4100	4100 FOMBI REVIEW COMPLETE			
	421	1 0			
A	4100	4200 FOMBI PUBLISH & SOLICIT PUBLIC COMMENTS	DATE	00	2
A	4200	4200 COMPLETE PROGRAMING DOCUMENTS	DATE	10	1
A	4200	4200 PUBLIC COMMENT PERIOD COMPLETE			
	431	1 0			
A	4200	4300 DE ISSUED TO MAJCOM/AFCE			
	441	0 0			
A	4300	4310 MAJCOM/AFCE NOTIFY DESIGN AGENT	AFCE	11	0
A	4310	4310 DA NOTIFIED BY DE			
	451	0 0			
A	4310	4400 DA PREPARATION FOR PREDESIGN CONF	DE	10	0
A	4400	4400 PREDESIGN CONFERENCE COMPLETE			
	461	0 0			
A	4400	4500 MAJCOM/AFCE COLLECT & REVIEW COMMS	AFCE	01	1
A	4500	4500 CONCEPTUAL DESIGN	DE	03	0
A	4500	4500 COMMENTS ON PREDESIGN COLLECTED			
	471	0 0			
A	4500	4600 RELAY COMMENTS TO DA	AFCE	0	0
A	4600	4600 DA RECEIVES COMMENTS			
	481	0 0			
A	4600	4800 EARLY PRELIMINARY DESIGN	DE	100	0
A	4800	4800 EARLY PRELIM DESIGN REVIEW COMPLETE			
	491	0 0			
A	4800	4900 MAJCOM/AFCE COLLECT & REVIEW COMMENTS	AFCE	01	1
A	4900	4900 PRELIMINARY DESIGN	DE	01	0
A	4900	4900 PRELIM DESIGN COMMENTS COLLECTED			
	501	0 0			
A	4900	5000 RELAY COMMENTS TO DA	AFCE	0	0

UNCLASSIFIED



FILED, AFCE

A	4000	5000 PREP FOR EARLY PRELIM DESIGN CONF	AFCE	21	1
A	5000	6000 DA RECEIVED COMMENTS			
	5100	1			
A	5000	5100 EARLY PRELIM DESIGN CONTINUES	777	32	2
A	5100	5100 EARLY PRELIM DESIGN CONF COMPLETE			
	5200	1			
A	5100	5200 2ND DESIGN NOTIFICATION TO HJSDN	777	1	0
A	5100	5400 EARLY PRELIM DESIGN CONF COMMENTS	777	40	13
A	5200	5200 2ND DESIGN REPORT SUBMITTED TO AFCE			
	5300	5127 1/76			
A	5200	5200 2ND DESIGN NOTIFICATION TO HQ USAF	AFCE	5127 1/76	2
A	5300	5200 2ND DESIGN NOTIFICATION TO HQ	HQ USAF	6	0
A	5300	5200 2ND DESIGN REPORT SUBMITTED TO HQ USAF			
	5400	1			
A	5400	5400 PRELIM DESIGN CONF COMPLETE			
	5500	1			
A	5400	5500 HJSDN/AFCE COLLECT & REVIEW COMMENTS	AFCE	46	1
A	5400	5500 FINAL DESIGN	AFCE	46	0
A	5500	5500 COMMENTS COLLECTED			
	5600	1			
A	5500	5600 RELAY COMMENTS TO DA	AFCE	0	0
A	5500	5700 PREP FOR PRELIM DESIGN CONFERENCE	AFCE	46	1
A	5600	5600 DA RECEIVED COMMENTS			
	5700	1			
A	5600	5700 PRELIM DESIGN CONTINUES	AFCE	30	2
	5800	1			
A	5700	5700 PRELIM DESIGN CONF COMPLETE			
	5900	1			
A	5700	5900 PRELIM DESIGN CONF COMMENTS INCORP	AFCE	46	13
A	5900	5900 FINAL DESIGN REVIEW COMPLETE			
	6000	1			
A	5900	6000 HJSDN/AFCE COLLECT & REVIEW COMMENTS	AFCE	46	1
A	5900	6000 FINAL DESIGN DETAILS	AFCE	46	0
A	5900	6200 2ND DESIGN NOTIFICATION TO HQ USAF	AFCE	46	0
A	5900	6000 COMMENTS COLLECTED			
	6100	1			
A	5900	6100 PREP FOR FINAL DESIGN CONFERENCE	AFCE	46	1
A	5900	6300 RELAY COMMENTS TO DA	AFCE	0	0

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A	6000	6000 FINAL DESIGN COMPLIANCE COMPLETE				
	611	1 0				
A	6000	6000 FINAL DESIGN COMMENTS INCORPORATED	701	510/ 1/78	45	5
A	6100	6100 FINAL DESIGN APPROVED				
	621	1 0				
A	6100	6100 CONTRACT PREPARATION	APCE		30	3
A	6200	6200 IFO PREPARATION	APCE		40	7
A	6300	6300 MAJOR/AFCEE CONTRACT REVIEW COMPLY				
	631	1 0				
A	6300	6300 FINAL DESIGN CONTINUED	002		20	3
A	6300	6300 DA RECEIVES COMMENTS				
	641	1 0				
A	6400	6400 FINAL DESIGN REVIEW BY MAJOR/AFCEE	APCE		20	7
A	6400	6400 DESIGN COMPLETE				
	651	510/ 1/78 1 0				

UNCLASSIFIED

ITEM- PAN 10 YEAR CAL  
REPORT DATE- 1/1/70  
RELEASE DATE- 1/1/1/69

UNCLASSIFIED  
PERITIME  
ACTIVITY REPORT  
REPORTING ORGN.  
AFIT/LS  
CONTRACT NO.  
LP1

FACILITY ACQUISITION NETWORK  
1ST SORT KEY PREDECESSOR EVENT NO.  
2ND SORT KEY SUCCESSOR EVENT NO.  
3RD SORT KEY LEAST SLACK  
4TH SORT KEY EXPIRED DATE (FF)

PROG.	SUCC.	ACTIVITY DESCRIPTION	PROB.	TIME EXPECTED	DATE	ALL-OUT	COMPL/	SCHED	SLACK	REMAINING	ORG.
1	99	--DUMMY START--	1.1	1/22/73	1/22/73				0.0	105.0	CONT
100	200	FACILITY REQUIREMENTS SENT TO BASE	1.1	1/22/73	1/22/73				0.0	171.0	BASE
200	300	FACILITY SUEVE	1.1	1/22/73	1/22/73				0.0	171.0	BASE
300	400	INITIAL ENVIRONMENTAL EVALUATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
400	500	CONSTRUCTION PROGRAM DETERMINATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
500	600	INITIAL DOCUMENTATION DEVELOPMENT	1.1	1/22/73	1/22/73				0.0	171.0	BASE
600	700	INITIAL DD FORM 1391 DEVELOPMENT	1.1	1/22/73	1/22/73				0.0	171.0	BASE
700	800	1951 PROJECT & REVIEW BY MAJCOM	1.1	1/22/73	1/22/73				0.0	171.0	BASE
800	900	APPROPRIATE PROJECT BOOK DEVELOPMENT	1.1	1/22/73	1/22/73				0.0	171.0	BASE
900	1000	PROGRAM AN-MOMENT & FORWARD TO HQ USAF	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1000	1100	MAJCOM REVIEW OF 1991	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1100	1200	PROGRAM REVIEW BY HQ USAF	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1200	1300	ABREVIATED DD MAILED TO MAJCOM	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1300	1400	COMPLETION PREPARATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1400	1500	MAJCOM REVIEW OF ABEVIATED PB	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1500	1600	APPROVED PROGRAM SELECTION BY HQ USAF	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1600	1700	PON ESTABLISHMENT BY HQ USAF	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1700	1800	DI ISSUE TO MAJCOM/AFCE	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1800	1900	COMPLETION MAILED TO MAJCOM	1.1	1/22/73	1/22/73				0.0	171.0	BASE
1900	2000	COMPLETION REVIEW & MAIL TO HQ USAF	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2000	2100	HQ USAF REVIEW OF PROGRAM	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2100	2200	OSD & JMS REVIEW OF PROGRAM	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2200	2300	PROGRAM SENT TO CONGRESS	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2300	2400	CONGRESSIONAL REVIEW & APPROVAL	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2400	2500	WILLS SIGNED BY PRESIDENT	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2500	2600	OMB RECOMMENDATIONS FUNDS	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2600	2700	HQ USAF ADOPTIONS FUNDS TO AFCE	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2700	2800	FINANCIAL PLANNING	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2800	2900	CHE PREPARATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
2900	3000	RD ADVERTISEMENT, FORMULATION & RECEIPT	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3000	3100	PALESTINE FOR AMAR	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3100	3200	SDS OP/CE7, REVIEWED & APPROVED	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3200	3300	PRECONSTRUCTION CONF PREPARATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3300	3400	FACILITY CONSTRUCTION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3400	3500	PRELIM INSPECTION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3500	3600	CORRECT INSPECTION DEFICIENCIES	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3600	3700	FINAL INSPECTION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3700	3800	FACILITY TRANSFER	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3800	3900	EQUIPMENT INSTALLATION	1.1	1/22/73	1/22/73				0.0	171.0	BASE
3900	4000	FACILITY AND EQUIPMENT CHECKOUT	1.1	1/22/73	1/22/73				0.0	171.0	BASE

UNCLASSIFIED

UNCLASSIFIED  
PERF/TIME  
ACTIVITY REPORT  
REPORTING ORGN.  
APIT/LS

TERM- PAN 11 YEAR CAL  
REPORT DATE- 1-7/1/79  
RELEASE DATE- 10/11/79

FACILITY ACQUISITION NETWORK  
1ST SORT KEY SUCCESSOR EVENT NO.  
2ND SORT KEY SUCCESSOR EVENT NO.  
3RD SORT KEY LEAST SLACK  
4TH SORT KEY EXPECTED DATE (YR)

PREL. EVENT	SUCC.	ACTIVITY DESCRIPTION	P338. TIME	ACTIV.	DATE	ALLOWED	DATE	SLACK	REMAINING
1600	3700	ENV ASSESSMENT & FORST DETERMINATION	39	1.8	3/21/73	2/11/74	14.5	170.2	RASE
1700	3800	EA PREPARATION TO BASE EPC	39	1.2	3/20/73	2/11/74	14.5	170.2	RASE
1800	3900	MALE JIC & DA REVIEW PONSIC	39	1.8	1/25/73	3/11/74	14.5	170.2	RASE
1900	4000	FORST JIC & DA REVIEW PONSIC	39	1.8	1/25/73	3/11/74	14.5	170.2	RASE
2000	4100	COMP. EPC & DCLAMING DOCUMENTS	39	1.8	1/25/73	3/11/74	14.5	170.2	RASE
2100	4200	MAJCOM/AFCE NOTIFY DESIGN AGENT	39	1.1	1/7/74	4/12/74	13.7	219.6	AFCE
2200	4300	MAJCOM/AFCE COLLECT & REVIEWS COMMENTS	39	1.6	1/17/74	4/12/74	13.7	219.6	AFCE
2300	4400	CONCEPTUAL DESIGN	39	1.1	2/15/74	4/12/74	13.7	219.6	AFCE
2400	4500	RELAY COMMENTS TO DA	39	1.8	2/21/74	4/12/74	13.7	219.6	AFCE
2500	4600	EARLY PRELIMINARY DESIGN	39	1.8	2/21/74	4/12/74	13.7	219.6	AFCE
2600	4700	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
2700	4800	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
2800	4900	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
2900	5000	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
3000	5100	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
3100	5200	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
3200	5300	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
3300	5400	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
3400	5500	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
3500	5600	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
3600	5700	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
3700	5800	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
3800	5900	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
3900	6000	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
4000	6100	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
4100	6200	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
4200	6300	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
4300	6400	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
4400	6500	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
4500	6600	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
4600	6700	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
4700	6800	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
4800	6900	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
4900	7000	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
5000	7100	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
5100	7200	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
5200	7300	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
5300	7400	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
5400	7500	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
5500	7600	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
5600	7700	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
5700	7800	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
5800	7900	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
5900	8000	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
6000	8100	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
6100	8200	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
6200	8300	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
6300	8400	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
6400	8500	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
6500	8600	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
6600	8700	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
6700	8800	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
6800	8900	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
6900	9000	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
7000	9100	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
7100	9200	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
7200	9300	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
7300	9400	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
7400	9500	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
7500	9600	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
7600	9700	RELAY COMMENTS TO DA	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
7700	9800	EARLY PRELIMINARY DESIGN	39	1.8	1/25/74	4/12/74	13.7	219.6	AFCE
7800	9900	MAJCOM/AFCE COLLECT & REVIEW COMMENTS	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE
7900	10000	PRELIMINARY DESIGN	39	1.1	1/25/74	4/12/74	13.7	219.6	AFCE

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PERFORM

MILESTONE REPORT

REPORTING ORGN.

ACT/LS

CONTRACT NO.

001

TERM FPM 10 YEAR GAL

REPORT DATE- 11/10/69

FACILITY ACQUISITION NETWORK

LEVEL/SUMMARY ITEM 27

RELEASE DATE- 11/11/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
100	FACILITY ACQUISITION NETWORK DEFINED BY CONTR	1	1/22/73	1/22/73			0.0
200	BASE FACILITY ACQUISITION REPORT	2	1/22/73	1/22/73			0.0
300	FACILITY ACQUISITION REPORT	3	1/22/73	1/22/73			0.0
400	BASE FACILITY ACQUISITION REPORT	4	1/22/73	1/22/73			0.0
500	CALL RECEIVED FROM MAJCOM	5	1/22/73	1/22/73			0.0
600	INITIAL PROGRAM RECEIVED BY MAJCOM	6	1/22/73	1/22/73			0.0
700	INITIAL PROGRAM RECEIVED BY MAJCOM	7	1/22/73	1/22/73			0.0
800	INITIAL PROGRAM RECEIVED BY MAJCOM	8	1/22/73	1/22/73			0.0
900	INITIAL PROGRAM RECEIVED BY MAJCOM	9	1/22/73	1/22/73			0.0
1000	INITIAL PROGRAM RECEIVED BY MAJCOM	10	1/22/73	1/22/73			0.0
1100	INITIAL PROGRAM RECEIVED BY MAJCOM	11	1/22/73	1/22/73			0.0
1200	INITIAL PROGRAM RECEIVED BY MAJCOM	12	1/22/73	1/22/73			0.0
1300	INITIAL PROGRAM RECEIVED BY MAJCOM	13	1/22/73	1/22/73			0.0
1400	INITIAL PROGRAM RECEIVED BY MAJCOM	14	1/22/73	1/22/73			0.0
1500	INITIAL PROGRAM RECEIVED BY MAJCOM	15	1/22/73	1/22/73			0.0
1600	INITIAL PROGRAM RECEIVED BY MAJCOM	16	1/22/73	1/22/73			0.0
1700	INITIAL PROGRAM RECEIVED BY MAJCOM	17	1/22/73	1/22/73			0.0
1800	INITIAL PROGRAM RECEIVED BY MAJCOM	18	1/22/73	1/22/73			0.0
1900	INITIAL PROGRAM RECEIVED BY MAJCOM	19	1/22/73	1/22/73			0.0
2000	INITIAL PROGRAM RECEIVED BY MAJCOM	20	1/22/73	1/22/73			0.0
2100	INITIAL PROGRAM RECEIVED BY MAJCOM	21	1/22/73	1/22/73			0.0
2200	INITIAL PROGRAM RECEIVED BY MAJCOM	22	1/22/73	1/22/73			0.0
2300	INITIAL PROGRAM RECEIVED BY MAJCOM	23	1/22/73	1/22/73			0.0
2400	INITIAL PROGRAM RECEIVED BY MAJCOM	24	1/22/73	1/22/73			0.0
2500	INITIAL PROGRAM RECEIVED BY MAJCOM	25	1/22/73	1/22/73			0.0
2600	INITIAL PROGRAM RECEIVED BY MAJCOM	26	1/22/73	1/22/73			0.0
2700	INITIAL PROGRAM RECEIVED BY MAJCOM	27	1/22/73	1/22/73			0.0
2800	INITIAL PROGRAM RECEIVED BY MAJCOM	28	1/22/73	1/22/73			0.0
2900	INITIAL PROGRAM RECEIVED BY MAJCOM	29	1/22/73	1/22/73			0.0
3000	INITIAL PROGRAM RECEIVED BY MAJCOM	30	1/22/73	1/22/73			0.0
3100	INITIAL PROGRAM RECEIVED BY MAJCOM	31	1/22/73	1/22/73			0.0
3200	INITIAL PROGRAM RECEIVED BY MAJCOM	32	1/22/73	1/22/73			0.0
3300	INITIAL PROGRAM RECEIVED BY MAJCOM	33	1/22/73	1/22/73			0.0
3400	INITIAL PROGRAM RECEIVED BY MAJCOM	34	1/22/73	1/22/73			0.0
3500	INITIAL PROGRAM RECEIVED BY MAJCOM	35	1/22/73	1/22/73			0.0
3600	INITIAL PROGRAM RECEIVED BY MAJCOM	36	1/22/73	1/22/73			0.0
3700	INITIAL PROGRAM RECEIVED BY MAJCOM	37	1/22/73	1/22/73			0.0
3800	INITIAL PROGRAM RECEIVED BY MAJCOM	38	1/22/73	1/22/73			0.0
3900	INITIAL PROGRAM RECEIVED BY MAJCOM	39	1/22/73	1/22/73			0.0
4000	INITIAL PROGRAM RECEIVED BY MAJCOM	40	1/22/73	1/22/73			0.0
4100	INITIAL PROGRAM RECEIVED BY MAJCOM	41	1/22/73	1/22/73			0.0
4200	INITIAL PROGRAM RECEIVED BY MAJCOM	42	1/22/73	1/22/73			0.0
4300	INITIAL PROGRAM RECEIVED BY MAJCOM	43	1/22/73	1/22/73			0.0
4400	INITIAL PROGRAM RECEIVED BY MAJCOM	44	1/22/73	1/22/73			0.0
4500	INITIAL PROGRAM RECEIVED BY MAJCOM	45	1/22/73	1/22/73			0.0

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PER/TIME  
MILESTONE REPORT  
CONTRACT NO.  
881  
FORM FAN 10 YEAR CAL  
REPORT DATE- 1-1-69

REPORTING OMGN.  
AFIT/LS

FACILITY ACQUISITION METHOD  
LEVEL/SUMMARY ITEM 2/

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	RELEASE DATE, 11/10/69	EXPECTED DATE	ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
480	PREDESIGN CONFERENCE COMPLETE	43	1/17/74	4/24/74				13.7
490	COMMENTS ON PREDESIGN COLLECTED	47	2/15/74	6/3/74				15.4
480	DA RECEIVED COMMENTS	46	3/14/74	6/2/74				13.7
490	EARLY PRELIM DESIGN REVIEW COMPLETE	49	3/27/74	9/3/74				13.7
490	PRELIM DESIGN COMMENTS COLLECTED	50	6/25/74	1/7/74				13.7
500	DA RECEIVED COMMENTS	51	7/2/74	1/7/74				13.7
510	EARLY PRELIM DESIGN CONF COMPLETE	52	7/24/74	1/7/74				13.7
520	35% DESIGN REPORT SUBMITTED TO AFMCE	53	7/25/74	1/31/74		11/19/74		13.7
530	35% DESIGN REPORT SUBMITTED TO MO USAF	54	7/26/74	1/31/74				13.7
540	PRELIM DESIGN REVIEW COMPLETE	55	3/24/75	1/24/75				10.0
550	COMMENTS COLLECTED	56	4/22/75	3/14/75				10.0
560	DA RECEIVED COMMENTS	57	11/24/74	3/21/75				10.0
570	PRELIM DESIGN CONF COMPLETE	58	12/12/74	4/11/75				10.0
580	FINAL DESIGN REVIEW COMPLETE	59	2/20/75	6/19/75				10.0
590	COMMENTS COLLECTED	60	3/20/75	7/18/75				10.0
600	FINAL DESIGN CONFERENCE COMPLETE	61	6/10/75	8/7/75				10.0
610	FINAL DESIGN APPROVAL	62	6/10/75	10/20/75				10.0
620	MANUFACTURE CONTRACT REVIEW COMPLET	63	10/20/75	10/20/75				0.0
630	DA RECEIVES COMMENTS	64	3/27/75	7/25/75		11/1/75		10.0
640	DESIGN COMPLETE	65	3/27/75	9/11/75				10.0
700	INITIAL 1991 COMPLETION	66	6/24/73	6/24/73				0.0

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APPENDIX E  
WEAPONS SYSTEM ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity ( $\sigma_{t_e}$ ) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.



The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time ( $t_e$ ) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date ( $T_E$ ) for completion of the activity.

ALLOWABLE DATE - latest allowable date ( $T_L$ ) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date ( $T_A$ ) is shown preceded by the letter A. If a required completion date has been specified, that date ( $T_R$ ) is shown preceded by the letter R.

SLACK - slack for the activity ( $T_L - T_E$ )

TIME REMAINING - time from the report date until expected completion date ( $T_E$ ) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date ( $T_E$ ) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date ( $T_L$ ) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event ( $T_A$ ).

SLACK - slack for the event ( $T_L - T_E$ )

LEADS  
A... ALIEN OF INTEREST  
B... ALIEN OF INTEREST  
C... ALIEN OF INTEREST  
D... ALIEN OF INTEREST  
... LEADS INDICATING NO CHANGE OF ACTIVITY ON JED MATRICE FILE

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A	10250	10250 RFP ISSUED TO INDUSTRY		
	1102	I		
A	10260	10260 INDUSTRY PREPARED REPLY TO RFP	1%	-0
A	10260	10260 RESPONSE TO RFP RECEIVED		
	1172	I		
A	10270	10270 INDUSTRY REPLY EVALUATION	90	-0
A	10270	10270 SMC RECOMMENDATIONS SUPPLIED TO SEA		
	1102	I		
A	10270	10270 FINAL SOURCE SELECTION (EVALUATION (P))	72	-0
A	10280	10280 RFP FOR GUN ISSUED TO INDUSTRY		
	1102	I		
A	10290	10290 INDUSTRY REPLY FORMULATION & EVALUATIONS	200	-0
A	10290	10290 DEMO 1		
	1202	I		
A	10290	10290 DEMO 1 REVIEW & SELECTION	2	-0
A	10300	10300 CONTRACTORS SELECTED FOR CON PROTOTYPE		
	1212	I		
A	10300	10300 FINAL CONTRACT PREPARATION	0	-0
A	10300	10300 A-ENGINE CONTRACT DEVELOPMENT	0%	-0
A	10310	10310 AUTHORIZATION TO AWARD CONTRACT		
	1222	I		
A	10310	10310 PROTOTYPE ENGINEERING	02	-0
A	10310	10310 A-0 ENGINE CONTRACT NEGOTIATING	000	-0
A	10320	10320 PROTOTYPES DESIGNATED A-0 & A-10		
	1232	I		
A	10320	10320 PROTOTYPE FABRICATION & MANUFACTURE A-10	00%	-0
A	10320	10320 PROTOTYPE FABRICATION & MANUFACTURE A-0	002	-0
A	10320	10320 GUN PROTOTYPING CONTRACTORS SELECTED		
	1242	I		
A	10330	10330 GUN PROTOTYPE FABRICATION & MANUFACTURE	042	-0
A	10340	10340 A-0 ENGINE CONTRACT NEGOTIATED		
	1252	I		
A	10340	10340 A-0 ENGINE FABRICATION & TEST	00%	-0
A	10350	10350 A-10 FIRST FLIGHT		
	1262	I		
A	10350	10350 A-10 PROTOTYPE FLIGHT EVALUATION	012	-0
A	10360	10360 A-0 FIRST FLIGHT		
	1272	I		
A	10360	10360 A-0 PROTOTYPE FLIGHT EVALUATION	10%	-0

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A	10370	10370 PROPOSAL INSTRUCTIONS FOR FSO RELEASED		
	1242			
A	10370	10370 BASIC CONTRACT DEVELOPMENT & PLANNING	730	-0
A	10380	10380 START AIR FORCE FLYOFF		
	1290			
A	10390	10390 AIR FORCE COMPETITIVE FLYOFF	00	-0
A	10390	10390 FLYOFF COMPLETED		
	1312			
A	10400	10400 FLYOFF RESULTS EVALUATION	50	-0
A	10400	10400 DRAG II		
	1312			
A	10410	10410 REVIEW & RATIFICATION BY SSM	2	-0
A	10410	10410 A-10 SELECTED FOR FSO		
	1322			
A	10420	10420 FSO CONTRACT PREPARATION & NEGOTIATION	00	-0
A	10410	10410 INTERIM CONTRACT PREP & NEGOTIATION	00	-0
A	10420	10420 CONTRACT AWARDED TO FSO FOR FSO		
	1332			
A	10420	10420 PREPRODUCTION DESIGN MODIFICATIONS	70	-0
A	10420	10420 TOOL PLANNING DESIGN & MANUFACTURE	100	-0
A	10420	10420 WIND TUNNEL DRAG TESTS	120	-0
A	10420	10420 CONDUCT STATIC ARTICLE TESTS	1100	-0
A	10420	10420 FATIGUE ARTICLE TEST PLANNING	200	-0
A	10420	10725 STRESS TEST DESIGN MODIFICATIONS	00	-0
A	10420	10750 HSC TEST PLANNING	00	-0
-	10420	10770 PREPARE VENDOR SPECS	10	-0
A	10420	10840 DETERMINE POLLIN DESIGN LOADS	00	-0
A	10420	10870 SUN LOCATION DETERMINATION	100	-0
A	10420	10900 PREPARE AVIONICS ORDERS	200	-0
A	10420	10910 INITIAL COST VERIFICATION	000	-0
A	10420	10920 CONTRACT MONITORING & PLANNING	000	-0
A	10420	10960 SPECIFICATION UPDATING	00	-0
A	10420	11000 PREPARE TRAINING PLANS	00	-0

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A	10430	10430 ENGINE CONTRACT AWARD TO GE		
	1342			
A	10450	11140 PRELIM MODIFICATION TO ENGINE DESIGN	46	-0
A	10440	10440 GUN COMPETITIVE SHOOTOFF BEGINS		
	1352			
A	10460	10450 GUN COMPETITIVE FLYOFF	134	-0
A	10480	10450 GUN COMPETITIVE SHOOTOFF ENDS		
	1362			
A	10450	10460 GUN COMPETITIVE FLYOFF EVAL & SELECTIONS	66	-0
A	10460	10460 GE SELECTED FOR GUN PSD		
	1372			
A	10461	10470 FINAL CONTRACT PREP & NEGOTIATION	10	-0
A	10470	10470 CONTRACT AWARD TO GE FOR GUN		
	1382			
A	10470	11100 PRELIM MODIFICATION TO GUN DESIGN	82	-0
A	10480	10480 DESIGN LAYOUTS COMPLETE		
	1392			
A	10480	10480 FINALIZE MAJOR COMPONENT DESIGN	46	-0
A	10490	10490 MAJOR FORGING RELEASE		
	1402			
A	10490	10500 FINALIZE DESIGN	46	-0
A	10490	10510 MANUFACTURE AND DELIVER FORGINGS	170	-0
A	10510	10500 DESIGN FREEZE		
	1412			
A	10500	10520 PREPARE STRUCTURAL DRAWINGS	200	-0
A	10510	10510 RECEIVE FORGINGS		
	1422			
A	10510	10570 ASSEMBLE MAJOR COMPONENTS	30	-0
A	10520	10520 RELEASE STRUCTURAL DRAWINGS		
	1432			
A	10570	10530 PREPARE FINAL ASSEMBLY PLANS & JOBS	222	-0
A	10530	10530 STRUCTURAL ASSEMBLY MANUFACTURE		
	1442			
A	10530	10590 FINAL ASSEMBLY A/C #1	44	-0
A	10590	10590 TOOL PLANNING, DESIGN & MANUFACTURE COMP		
	1452			
A	10590	10590 TOOL RELEASE & SET-UP	44	-0
A	10590	10590 RELEASE TOOLS		
	1462			
A	10590	10590 DEVELOP MANUFACTURING DETAILS	44	-0

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A	10560	10560 MANUFACTURING DETAILS COMPLETE		
1472				
A	10560	10570 MANUFACTURE COMPONENTS	170	-0
A	10570	10530 ASSEMBLE SUBSTRUCTURE	304	-0
A	10570	10570 STRUCTURAL ASSEMBLY COMP		
1482				
A	10580	10580 FINAL ASSEMBLY A/C #1 COMPLETE		
1492				
A	10580	10590 GROUND TESTING	95	-0
A	10590	10590 GROUND TEST COMPLETE		
1512				
A	10590	10600 PREPARATION FOR FIRST FLIGHT	20	-0
A	10600	10600 FIRST FLIGHT A/C #1 (PREPROD)		
1512				
A	10600	10610 PREPRODUCTION AIRCRAFT CONSTRUCTION	425	-0
A	10610	10620 INITIAL AIRCRAFT TESTING & DELIVERY	62	-0
A	10610	10610 DELIVER A/C #10 (PREPROD)		
1522				
A	10610	10620 DELIVERY & TEST OF LAST PREPROD A/C	672	-0
A	10610	11200 MANUFACTURE PRODUCTION A/C # 1	15	-0
A	10620	10620 START STAE TESTING		
1532				
A	10620	10630 DTIC OF PREPRODUCTION AIRCRAFT	1025	-0
A	10630	10630 COMPLETE STAE TESTING		
1542				
A	10630	11200 --SUNNY--	0	-0
A	10640	10640 COMPLETE WIND TUNNEL TESTS		
1552				
A	10640	10650 STORE SEPARATION TESTS	222	-0
A	10650	10650 STORE SEPARATION TEST COMPLETE		
1562				
A	10660	10660 FLUTTER TESTS	240	-0
A	10660	10660 --SUNNY--	0	-0
A	10660	10660 COMPLETE FLUTTER TESTS		
1572				
A	10670	10630 --SUNNY--		
A	10670	10670 STATIC ARTICLE TESTS COMPLETE	0	-0
1582				
A	10680	10680 FATIGUE ARTICLE TEST PLANNING COMP		
1592				

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A	10680	10680 FATIGUE ARTICLE FABRICATION & ASSEMBLY	622	-0
A	10690	10690 FINAL ASSEMBLY COMPLETE		
31.2				
A	10700	10700 FATIGUE TESTING	364	-0
A	10700	10700 1 LIFETIME FATIGUE TESTING COMP		
36.2				
A	10700	10700 FATIGUE TESTING CONTINUES	222	-0
A	10710	10710 2 LIFETIMES FATIGUE TESTING COMP		
36.22				
A	10710	10710 FATIGUE TESTING CONTINUES	262	-0
A	10720	10630 --UNWT--	0	-0
A	10720	10720 4 LIFETIMES FATIGUE TESTING COMP		
36.22				
A	10720	10720 CORROS TESTS DESIGN MODS COMP		
36.22				
A	10720	10720 CORROS STRUCTURAL TESTS	262	-0
A	10730	10730 CORROS STRUCTURAL TESTS COMP		
36.42				
A	10730	10730 CORROS TRACK TESTS	224	-0
A	10740	10600 --UNWT--	0	-0
A	10740	10740 CORROS TRACK TESTS COMP		
36.62				
A	10750	10750 MISC TEST PLANNING COMP		
36.72				
A	10760	10760 CONDUCT MISC TESTS	1906	-0
A	10760	10630 --UNWT--	0	-0
A	10760	10760 MISC TESTS COMPLETE		
36.82				
A	10770	10770 RELEASE VENDOR SPECS		
36.82				
A	10770	10760 --UNWT--	0	-0
A	10770	10770 VENDOR REPLY & EVALUATION	60	-0
A	10780	10780 ISSUE RFD		
37.02				
A	10790	10800 PREPARE VENDOR CONTRACT	76	-0
A	10790	10790 SELECT VENDOR		
37.12				
A	10790	10800 FINAL CONTRACT NEGOTIATIONS	10	-0
A	10790	10810 PREPARE INSTALLATION DRAWINGS	344	-0

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A	10000	10000 ISSUE PURCHASE ORDER		
	1722	I		
A	10000	10000 MANUFACTURE & TEST COMPONENTS	902	-0
A	10010	10010 --SUMMARY--	0	-0
A	10010	10010 RELEASE INSTALLATION DRAWINGS		
	1722	I		
A	10010	10010 MANUFACTURE & TEST COMPONENTS	112	-0
A	10020	10020 --SUMMARY--	0	-0
A	10020	10020 QUALIFICATION TESTS COMPLETE		
	1742	I		
A	10030	10030 INSTALL COMPONENTS	00	-0
A	10030	10030 RECEIVE COMPONENTS		
	1762	I		
A	10040	10040 --SUMMARY--	0	-0
A	10040	10040 PRELIM DESIGN LOADS & CRITERIA SET		
	1762	I		
A	10040	10040 DETERMINE FINAL DESIGN LOADS	202	-0
A	10050	10050 --SUMMARY--	0	-0
A	10050	10050 FINAL DESIGN LOADS & CRITERIA SET		
	1772	I		
A	10060	10060 VIBRATION & ACOUSTIC ANALYSIS	200	-0
A	10060	10060 --SUMMARY--	0	-0
A	10060	10060 VIBRATION & ACOUSTIC ANALYSIS COMPLETE		
	1782	I		
A	10070	10070 GUN LOCATION PRELIM		
	1782	I		
A	10070	10070 PREPARE GUN INSTALLATION DRAWINGS	430	-0
A	10080	10080 GUN EXPLOSION/CRACKS	222	-0
A	10080	10080 GUN INSTALLATION DRAWINGS COMPLETE		
	1812	I		
A	10090	10090 AVIONICS LONG LEAD ORDERS RELEASED		
	1812	I		
A	10090	10090 AVIONICS INTEGRATION & TESTING	002	-0
A	10090	10090 NEGOTIATE ORDER	22	-0
A	10090	10090 --SUMMARY--	0	-0
A	10090	10090 AVIONICS INTEGRATION & TESTING COMPLETE		
	1822	I		
A	10010	10010 DESIGN TO COST GUN COMPLETE		
	1822	I		

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A	10910	11200 REVISE PRELIM FSD DATA		
A	10910	11220 PREPARE LOWS LEAD ORDER #1	142	-0
A	10920	10920 PDR	142	-0
1042				
A	10920	10930 CONTRACT MONITORING & PLANNING		
A	10930	10930 PDR	150	-0
1052				
A	10930	10940 CONTRACT MONITORING & PLANNING		
A	10940	10940 CDR	145	-0
1062				
A	10940	10950 CONTRACT MONITORING & PLANNING		
A	10950	10950 CONTRACT MONITORING & PLANNING	142	-0
A	10950	10950 SAFETY INSPECTION	144	-0
1072				
A	10960	10960 SPEC UPDATE		
1082				
A	10960	11070 DETERMINE GUN INTERFERENCE DATA		
A	10970	11070 PRELIM GUN INTERFERENCE DATA COMP	150	-0
1092				
A	10970	11080 AQOR ANALYSIS		
A	10980	11080 AQOR ANALYSIS COMPLETE	152	-0
1102				
A	10980	11090 MULTIPLE AREA ANALYSIS		
A	10990	11090 MULTIPLE AREA ANALYSIS	152	-0
1112				
A	10990	11000 DETERMINE FINAL GUN INTERFERENCE DATA		
A	11000	11030 --3M44--	154	-0
A	11000	11000 FINAL GUN INTERFERENCE SPEC	1	-0
1122				
A	11010	11010 INITIAL PLANS COMPLETE		
1132				
A	11010	11020 PRELIM DESIGN OF NORMAL PAINT TONER SYS		
A	11020	11020 FINAL HTS DESIGN	159	-0
1142				
A	11020	11030 FINAL HTS DESIGN		
A	11030	11030 HTS DESIGN FREEZE	220	-0
1152				
A	11030	11040 FINALIZE HTS DESIGN DETAILS		
A	11040	11040 HTS PDR	170	-0
1162				

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A	11040	11050 MTS PLANNING & DESIGN REVIEW		
A	11050	11050 MTS COR	110	-0
1972				
A	11050	11060 MTS CONSTRUCTION		
A	11060	11060 MTS PCA/TCA	512	-0
1982				
A	11060	11070 MTS FINAL DETAILING & DELIVERY		
A	11070	10630 --31144--	40	-0
A	11070	11070 DELIVERY OF MTS		-0
1992				
A	11080	11080 CPLE ORDERED		
2072				
A	11080	11080 MANUFACTURE & DELIVER AVIONICS	302	-0
A	11090	10990 INSTALL AVIONICS	132	-0
A	11090	11090 CPLE RECEIVED		
2012				
A	11100	11100 SUB COR		
2022				
A	11100	11110 PREPRODUCTION SUB FABRICATION	100	-0
A	11110	11110 RESERVE PHASE 1 SUB		
2032				
A	11110	11120 FINALIZE SUB DESIGN		
A	11120	11120 SUB COR	400	-0
2042				
A	11120	11130 TEST & QUALIFY SUB		
A	11130	10630 --31144--	210	-0
A	11130	11130 SUB QUAL TESTS COMPLETE	5	-0
2052				
A	11130	11080 CONTINUING CPM PRODUCTION & DELIVERY		
A	11140	11140 ENGINE HARDWARE DESIGN COMP	1200	-0
2062				
A	11140	11150 FINALIZE ENGINE DESIGN		
A	11150	11150 ENGINE COR	112	-0
2072				
A	11150	11160 PRELIM ENGINE TESTING		
A	11160	11160 AEDC ENGINE EXPLORATORY TESTS COMP	301	-0
2082				
A	11160	11170 ENGINE QUALIFICATION TESTING		
A	11170	11170 AEDC QUAL TESTS COMP	100	-0
2092				
A	11170	11170 AEDC QUAL TESTS COMP		

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A	11170	11180 PREPRODUCTION ENGINE FABRICATION	40	-0
A	11170	11180 ENGINE QUALIFICATION TESTING	120	-0
A	11181	11180 RECEIPT ENGINE #1		
2112				
A	11180	11180 PREPRODUCTION ENGINE TESTING	40	-0
A	11190	10830 --BUNNY--		-0
A	11190	11190 NOT APPROVAL		
2112				
A	11190	12000 CONTINUING ENGINE PRODUCTION & DELIVERY	120	-0
A	11200	11200 DESIG ITA		
2122				
A	11200	11210 VERIFICATION OF DESIG RECOMMENDATIONS	20	-0
A	11210	11210 AUTHORIZATION FOR INITIAL PRODUCTION		
2132				
A	11210	11220 AUTHORITY LONG LEAD ORDER	120	-0
A	11215	11215 DESIG ITT		
2142				
A	11215	11270 VERIFICATION OF DESIG RECOMMENDATIONS	20	-0
A	11220	11220 LONG LEAD ITEMS OPT 1 FUNDING PRINT		
2152				
A	11220	11230 PREPARE LONG LEAD ORDER OR	200	-0
A	11220	11230 --JUNNY--		-0
A	11230	11230 LONG LEAD ITEMS OPT 2 FUNDING PRINT		
2162				
A	11230	11240 PROGRAM COST VERIFICATION	20	-0
A	11240	11245 REVIEW OF FSD DATA	200	-0
A	11240	11240 DESIGN TO COST DEMO		
2172				
A	11240	11250 REVIEW OF TEST DATA	90	-0
A	11250	11250 PC1		
2182				
A	11250	11260 REVIEW OF FSD DATA	40	-0
A	11260	11215 PREPARATION FOR DESIG REVIEW	60	-0
A	11260	11260 PC1		
2192				
A	11270	11270 FOTAE PROGRAM START		
2212				
A	11270	11290 FOTAE	220	-0

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A	11200	11200 ACME PROGRAM END (PHASE 1)		
	2212	1		
A	11200	11200 INITIAL OPERATIONAL CABLE TRAINING & DUAL	320	-0
A	11200	11200 10725	210	-0
A	11200	11200 121 PRODUCTION A/C DELIVERY		
	2222	1		
A	11200	11200 GROUP TEST & TRAINING UNITS	770	-0
A	11200	12000 CONTINUING AIRCRAFT PRODUCTION	660	-0
A	11200	11200 OPERATIONAL UNIT 100		
	2232	1		
A	11200	12000 --GROUP--	0	-0
A	11210	11200 FINAL PREPARATION & COORDINATION	220	-0
A	11210	11200 SAT OF ACTIVATED		
	2242	1		
A	12000	12000 DUMMY RETURN END		
	2250	1		

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ACTIVITY REPORT  
REPORTING ORGN.  
APIT/LS  
CONTRACT NO.  
9-1

T-RM- USA J. YEAM CAL  
REPORT DATE- 10/11/79  
RELEASE DATE- 10/11/79

WEAPON'S SYS ACQ NETWORK  
1ST SORT KEY PREDECESSOR EVENT NO.  
2ND SORT KEY SUCCESSOR EVENT NO.  
3RD SORT KEY LEAST FLAG  
4TH SORT KEY EXPECTED DATE (YF)

PROB.	TIME	ACTIVITY DESCRIPTION	PROB.	TIME	EXPECTED	ALL JED	COMP/SCHED	DATE	SLACK	FORMING	ON-C.
10720	10720	10720	10720	10720	10720	10720	10720	10720	10720	10720	10720
10730	10730	10730	10730	10730	10730	10730	10730	10730	10730	10730	10730
10740	10740	10740	10740	10740	10740	10740	10740	10740	10740	10740	10740
10750	10750	10750	10750	10750	10750	10750	10750	10750	10750	10750	10750
10760	10760	10760	10760	10760	10760	10760	10760	10760	10760	10760	10760
10770	10770	10770	10770	10770	10770	10770	10770	10770	10770	10770	10770
10780	10780	10780	10780	10780	10780	10780	10780	10780	10780	10780	10780
10790	10790	10790	10790	10790	10790	10790	10790	10790	10790	10790	10790
10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800	10800
10810	10810	10810	10810	10810	10810	10810	10810	10810	10810	10810	10810
10820	10820	10820	10820	10820	10820	10820	10820	10820	10820	10820	10820
10830	10830	10830	10830	10830	10830	10830	10830	10830	10830	10830	10830
10840	10840	10840	10840	10840	10840	10840	10840	10840	10840	10840	10840
10850	10850	10850	10850	10850	10850	10850	10850	10850	10850	10850	10850
10860	10860	10860	10860	10860	10860	10860	10860	10860	10860	10860	10860
10870	10870	10870	10870	10870	10870	10870	10870	10870	10870	10870	10870
10880	10880	10880	10880	10880	10880	10880	10880	10880	10880	10880	10880
10890	10890	10890	10890	10890	10890	10890	10890	10890	10890	10890	10890
10900	10900	10900	10900	10900	10900	10900	10900	10900	10900	10900	10900
10910	10910	10910	10910	10910	10910	10910	10910	10910	10910	10910	10910
10920	10920	10920	10920	10920	10920	10920	10920	10920	10920	10920	10920
10930	10930	10930	10930	10930	10930	10930	10930	10930	10930	10930	10930
10940	10940	10940	10940	10940	10940	10940	10940	10940	10940	10940	10940
10950	10950	10950	10950	10950	10950	10950	10950	10950	10950	10950	10950
10960	10960	10960	10960	10960	10960	10960	10960	10960	10960	10960	10960
10970	10970	10970	10970	10970	10970	10970	10970	10970	10970	10970	10970
10980	10980	10980	10980	10980	10980	10980	10980	10980	10980	10980	10980
10990	10990	10990	10990	10990	10990	10990	10990	10990	10990	10990	10990
11000	11000	11000	11000	11000	11000	11000	11000	11000	11000	11000	11000
11010	11010	11010	11010	11010	11010	11010	11010	11010	11010	11010	11010
11020	11020	11020	11020	11020	11020	11020	11020	11020	11020	11020	11020
11030	11030	11030	11030	11030	11030	11030	11030	11030	11030	11030	11030
11040	11040	11040	11040	11040	11040	11040	11040	11040	11040	11040	11040
11050	11050	11050	11050	11050	11050	11050	11050	11050	11050	11050	11050
11060	11060	11060	11060	11060	11060	11060	11060	11060	11060	11060	11060
11070	11070	11070	11070	11070	11070	11070	11070	11070	11070	11070	11070
11080	11080	11080	11080	11080	11080	11080	11080	11080	11080	11080	11080
11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090	11090
11100	11100	11100	11100	11100	11100	11100	11100	11100	11100	11100	11100
11110	11110	11110	11110	11110	11110	11110	11110	11110	11110	11110	11110
11120	11120	11120	11120	11120	11120	11120	11120	11120	11120	11120	11120
11130	11130	11130	11130	11130	11130	11130	11130	11130	11130	11130	11130
11140	11140	11140	11140	11140	11140	11140	11140	11140	11140	11140	11140
11150	11150	11150	11150	11150	11150	11150	11150	11150	11150	11150	11150
11160	11160	11160	11160	11160	11160	11160	11160	11160	11160	11160	11160
11170	11170	11170	11170	11170	11170	11170	11170	11170	11170	11170	11170
11180	11180	11180	11180	11180	11180	11180	11180	11180	11180	11180	11180
11190	11190	11190	11190	11190	11190	11190	11190	11190	11190	11190	11190
11200	11200	11200	11200	11200	11200	11200	11200	11200	11200	11200	11200

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UNCLASSIFIED		PERT/TIME		MILESTONE REPORT		CONTRACT NO.		FORM WSA 30 YEAR CAL		REPORT DATE- 1/11/69	
WEAPONS SYS ACC NETWORK		REPORTING ORGN.		MILESTONE REPORT		781					
LEVEL/SUMMARY ITEM		APPT/LS		MILESTONE REPORT							



APPENDIX F  
INTEGRATED ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity ( $\sigma_{t_e}$ ) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.

The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time ( $t_e$ ) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date ( $T_E$ ) for completion of the activity.

ALLOWABLE DATE - latest allowable date ( $T_L$ ) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date ( $T_A$ ) is shown preceded by the letter A. If a required completion date has been specified, that date ( $T_R$ ) is shown preceded by the letter R.

SLACK - slack for the activity ( $T_L - T_E$ )

TIME REMAINING - time from the report date until expected completion date ( $T_E$ ) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date ( $T_E$ ) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date ( $T_L$ ) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event ( $T_A$ ).

SLACK - slack for the event ( $T_L - T_E$ )



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 Activity  
 Record  
 Date  
 Description  
 Amount  
 Balance

UPDATE CODE	DATE	EVENT	DESCRIPTION	AMOUNT	DATE	ACT	TIME	VALUE
A	100	100	100 FACILITY REQUIREMENTS DEFINED BY COMBAT					
11								
A	100	200	200 FACILITY REQUIREMENTS SENT TO BASE	200				
A	200	200	200 FACILITY REQUIREMENTS REPORT					
21								
A	200	300	300 FACILITY SURVEY	BASE				
A	200	300	300 INITIAL ENVIRONMENTAL EVALUATION	BASE				
A	300	300	300 FACILITY SURVEY COMPLETE					
31								
A	300	400	400 CONSTRUCTION PROGRAM DETERMINATION	BASE				
A	400	400	400 BASE BY APPROVED FACILITY CONSTR					
41								
A	400	500	500 INITIAL DOCUMENTATION DEVELOPMENT	BASE				
A	500	500	500 CALL RECEIVED FROM MAJCOM					
51								
A	500	700	700 INITIAL DD FORM 1391 DEVELOPMENT	BASE				
A	700	700	700 INITIAL 1391 COMPLETED					
61								
A	700	800	800 1391 RECEIPT & REVIEW BY MAJCOM	MAJCOM	8/15/73	60		
A	800	800	800 APPROVED PROJECT BOOK DEVELOPMENT	BASE				
A	800	800	800 INITIAL DD FORM 1391 RECEIVED BY MAJCOM					
81	8/15/73							
A	800	900	900 PROGRAM INTENDENT & FORWARDED TO HQ USAF	MAJCOM	8/15/73	100		
A	900	900	900 MAJCOM REVIEW OF 1391	MAJCOM	8/15/73	60		
A	900	900	900 INITIAL PROGRAM RECEIVED BY HQ USAF					
91	8/15/73							
A	900	1000	1000 PROGRAM REVIEW BY HQ USAF	HQ USAF		100		
A	1000	1000	1000 APPROVED PROJECT BOOK COMPLETED					

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A	2210	2210 FUNDS APPORTIONED BY HQ USAF			
2-3					
A	2210	6000 FINANCIAL PLANNING	AFCT	51	4
A	2300	2300 IFS READY			
251					
A	2300	2400 CUE PREPARATION	AFCT	16	2
A	2300	2500 BID ADVERTISEMENT, FORMULATION & RECEIPT	AFCT	63	2
A	2400	2400 CUE PREPARED			
261					
A	2400	2500 PREPARATION FOR AWARD	AFCT	42	2
A	2500	2600 CONSTRUCTION AIDS PREPARED			
271					
A	2500	2600 VISA OFFERED, REVIEWED & APPROVED	AFCT	10	1
A	2600	2600 CONTRACT AWARD			
291					
A	2600	2800 PRECONSTRUCTION CONF. PREPARATION	AFCT	10	1
A	2800	2800 PRECONSTRUCTION CONFERENCE COMPLETE			
301					
A	2900	2900 FACILITY CONSTRUCTION	AFCT	1033	13
A	2900	2900 FACILITY CONSTRUCTED			
301					
A	3000	3000 PRELIMINARY INSPECTION	AFCT	10	0
A	3010	3000 PRELIMINARY INSPECTION COMPLETE			
311					
A	3020	3100 CORRECT INSPECTION DEFICIENCIES	AFCT	06	7
A	3100	3100 DEFICIENCIES CORRECTED			
321					
A	3100	3200 FINAL INSPECTION	AFCT	2	0
A	3200	3200 FINAL INSPECTION COMPLETE			
331					
A	3200	3300 FACILITY TRANSFER	AFCT	0	1
A	3300	3300 FACILITY TRANSFER COMPLETE			
341					
A	3300	3400 EQUIPMENT INSTALLATION	AFCT	06	7
A	3400	3400 EQUIPMENT INSTALLATION COMPLETE			
351					
A	3400	3500 FACILITY AND EQUIPMENT CHECKOUT	AFCT	03	3
A	3500	3500 FACILITY READY FOR USE			
361					
A	3500	3600		0	0

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A	3600	3600 EATEX INAPPLICABILITY CONFIRMED			
	370				
A	3600	3700 ENV ASSESSMENT & FONSI DETERMINATION	3700	40	1
A	3700	3700 ENVIRONMENTAL ASSESSMENT COMPLETE			
	380				
A	3700	3800 EA PRESENTATION TO BASE APC	3800	2	1
A	3800	3800 BASE EPC APPROVED EA			
	390				
A	3800	4100 FONSE MC & PA REVIEW FONSE	4100	40	2
A	4100	4100 FONSI REVIEW COMPLETE			
	420				
A	4100	4200 FONSI PUBLISH & SOLICIT PUBLIC COMMENTS	4200	50	2
A	4200	4200 COMPLETE PROGRAMMING DOCUMENTS	4200	10	1
A	4200	4200 PUBLIC COMMENT PERIOD COMPLETE			
	430				
A	4300	4300 DI ISSUED TO NAJCON/APRCE			
	440				
A	4300	4310 NAJCON/APRCE NOTIFY DESIGN AGENT	4310	10	1
A	4310	4310 DA NOTIFIED OF DI			
	450				
A	4310	4400 DA PREPARATION FOR PREDESIGN CONF	4400	20	2
A	4400	4400 PREDESIGN CONFERENCE COMPLETE			
	460				
A	4400	4500 NAJCON/APRCE COLLECTS & REVIEWS COMMENTS	4500	40	2
A	4500	4500 CONCEPTUAL DESIGN	4500	50	0
A	4500	4500 COMMENTS ON PREDESIGN COLLECTED			
	470				
A	4500	4600 RELAY COMMENTS TO DA	4600	10	0
A	4600	4600 DA RECEIVED COMMENTS			
	480				
A	4600	4800 EARLY PRELIMINARY DESIGN	4800	100	0
A	4800	4800 EARLY PRELIM DESIGN REVIEW COMPLETE			
	490				
A	4800	4900 NAJCON/APRCE COLLECT & REVIEW COMMENTS	4900	40	1
A	4900	4900 PRELIMINARY DESIGN	4900	40	0
A	4900	4900 PRELIM DESIGN COMMENTS COLLECTED			
	500				
A	4900	5000 RELAY COMMENTS TO DA	5000	10	1
A	5000	5000 PREP FOR EARLY PRELIM DESIGN CONF	5000	20	1

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A	5000	5000 DA RECEIVED COMMENTS			
	511				
A	5000	5000 EARLY PRELIM DESIGN CONTINUED	001	30	3
A	5100	5100 EARLY PRELIM DESIGN CONF COMPLETE			
	521				
A	5100	5100 1ST DESIGN NOTIFICATION TO MAJCOM	001	2	0
A	5100	5100 EARLY PRELIM DESIGN CONF COMMENTS	001	00	10
A	5200	5200 1ST DESIGN REPORT SUBMITTED TO AFCE			
	531	512/ 1/76			
A	5200	5200 1ST DESIGN NOTIFICATION TO HQ USAF	AFCE	512/ 1/76	2 0
A	5300	5300 1ST DESIGN NOTIFICATION TO OSD	HQ USAF		0 0
A	5300	5300 1ST DESIGN REPORT SUBMITTED TO HQ USAF			
	541				
A	5400	5400 PRELIM DESIGN REVIEW COMPLETE			
	551				
A	5400	5400 MAJCOM/AFCE COLLECT & REVIEW COMMENTS	AFCE	01	1
A	5400	5400 FINAL DESIGN	001	00	0
A	5500	5500 COMMENTS COLLECTED			
	561				
A	5500	5500 RELAY COMMENTS TO DA	AFCE	0	0
A	5600	5600 PREP FOR PRELIM DESIGN CONFERENCE	AFCE	01	1
A	5600	5600 DA RECEIVED COMMENTS			
	571				
A	5600	5700 PRELIM DESIGN CONTINUED	001	30	3
A	5700	5700 PRELIM DESIGN CONF COMPLETE			
	581				
A	5700	5800 PRELIM DESIGN CONF COMMENTS INCORP	001	00	10
A	5800	5800 FINAL DESIGN REVIEW COMPLETE			
	591				
A	5800	5900 MAJCOM/AFCE COLLECT & REVIEW COMMENTS	AFCE	01	1
A	5900	5900 FINAL DESIGN DETAILS	001	00	0
A	5900	5900 1ST DESIGN NOTIFICATION TO HQ USAF	AFCE	10	1
A	5900	5900 COMMENTS COLLECTED			
	601				
A	5900	6000 PREP FOR FINAL DESIGN CONFERENCE	AFCE	01	1
A	6000	6000 RELAY COMMENTS TO DA	AFCE	0	0
A	6000	6000 FINAL DESIGN CONFERENCE COMPLETE			
	611				

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A	6000	6000 FINAL DESIGN COMMENTS INCORPORATED	207	211/ 1/75	40	5
A	6100	6100 FINAL DESIGN APPROVED				
621						
A	6100	6200 CONTRACT PREPARATION	67107		32	3
A	6200	6300 175 PREPARATION	67407		42	7
A	6300	6300 NAJCOM/AFMCC CONTRACT REVIEW COMPLET				
631						
A	6300	6300 FINAL DESIGN CONTINUES	207		24	1
A	6300	6300 3A RECEIVES COMMENTS				
641						
A	6400	6100 FINAL DESIGN REVIEW BY NAJCOM/AFMCC	67407		34	7
A	6400	6400 DESIGN COMPLETE				
651 211/ 1/75						
A	10000	10000 DUMMY NETWORK START EVENT				
1030						
A	10000	10100 DUMMY NETWORK START		211/1/75	0	-0
A	10100	10100 3M REQUESTS TO COMPETITIVE PROUD STRAT				
1040						
A	10100	10100 PREPARE REVISED DRAFT DCP			04	-0
A	10100	10200 CONTINUE BASELINE PREPARATION & ANALYSIS			204	-0
A	10100	10100 REVISED DRAFT DCP PREPARED				
1050						
A	10100	10200 PREPARE FOR DDMC REVIEW OF WHEATST			0	-0
A	10100	10210 FINAL DCP PREPARATION			120	-0
A	10200	10200 DDMC REVIEW COMPLETE				
1060						
A	10200	10220 RATIFICATION OF RECON BY DECISION AUTH			100	-0
A	10210	10210 FINAL DCP 23A COMPLETED				
1070						
A	10210	10220 FINAL DCP APPROVAL			30	-0
A	10220	10220 DCP 23A APPROVED BY DEPUTY SECDEF				
1080						
A	10220	10270 PWD FINALIZATION			0	-0
A	10230	10270 PWD ISSUED				
1090						
A	10230	10290 PROGRAM CONTROL FORMALIZATION			10	-0
A	10240	10290 A-S SPO FULLY ESTABLISHED				
1092						
A	10240	10290 FINALIZE RPP			10	-0

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A	10190	10190 GUN RFP PREPARATION	104	-9
A	10200	10200 BASELINE DATA PREP & PLANNING	1134	-9
A	10250	10250 RFP ISSUED TO INDUSTRY		
1152				
A	10260	10260 INDUSTRY PREPARES REPLY TO RFP	126	-9
A	10280	10280 RESPONSE TO RFP RECEIVED		
1177				
A	10290	10290 INDUSTRY REPLY EVALUATION	99	-9
A	10270	10270 SSAC RECOMMENDATIONS SUBMITTED TO SSA		
1182				
A	10270	10270 FINAL SOURCE SELECTION EVALUATION (P)	72	-9
A	10280	10280 RFP FOR GUN ISSUED TO INDUSTRY		
1192				
A	10290	10290 INDUSTRY REPLY FORMULATION & EVALUATION	200	-9
A	10290	10290 SOURCE 2		
1202				
A	10290	10290 SOURCE 1 REVIEW & SELECTION	2	-9
A	10300	10300 CONTRACTORS SELECTED FOR CON PROTOTYPE		
1212				
A	10300	10300 FINAL CONTRACT PREPARATION	8	-9
A	10320	10320 A-9 ENGINE CONTRACT DEVELOPMENT	904	-9
A	10310	10310 AUTHORIZATION TO AWARD CONTRACT		
1222				
A	10310	10310 PROTOTYPE ENGINEERING	82	-
A	10310	10310 A-9 ENGINE CONTRACT NEGOTIATION	904	-9
A	10320	10320 PROTOTYPES DESIGNATED A-9 & A-10		
1232				
A	10320	10320 PROTOTYPE FABRICATION & MANUFACTURE A-9	492-2	-9
A	10320	10320 PROTOTYPE FABRICATION & MANUFACTURE A-10	882	-9
A	10330	10330 GUN PROTOTYPING CONTRACTORS SELECTED		
1242				
A	10330	10330 SIN PROTOTYPE FABRICATION & MANUFACTURE	842	-9
A	10340	10340 A-9 ENGINE CONTRACT NEGOTIATED		
1252				
A	10340	10340 A-9 ENGINE FABRICATION & TEST	204	-9
A	10350	10350 A-10 FIRST FLIGHT		
1262				
A	10350	10350 A-10 PROTOTYPE FLIGHT EVALUATION	212	-9

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A	10300	10300 A-9 FIRST FLIGHT		
1272				
A	10300	10300 A-9 PROTOTYPE FLIGHT EVALUATION		
A	10370	10370 PROPOSAL INSTRUCTIONS FOR FSO RELEASE	10	-0
1272				
A	10370	10400 BASIC CONTRACT DEVELOPMENT & PLANNING		
A	10500	10500 START AIR FORCE FLYOFF	20	-0
1272				
A	10500	10500 AIR FORCE COMPETITIVE FLYOFF		
A	10500	10500 FLYOFF COMPLETED	60	-0
1272				
A	10500	10400 FLYOFF RESULTS EVALUATION		
A	10400	10400 ENGINE Y1	50	-0
1272				
A	10400	10410 REVIEW & RATIFICATION BY SSM		
A	10410	10410 A-10 SELECTED FOR FSO	2	-0
1272				
A	10410	10420 FSO CONTRACT PREPARATION & NEGOTIATION		
A	10410	10430 ENGINE CONTRACT PREP & NEGOTIATION	50	-0
A	10420	100 FACILITY REQUIREMENTS REPORT GENERATION	50	-0
A	10420	10420 CONTRACT AWARDED TO FSC FOR Y20	200	10
1272				
A	10420	10400 PREPRODUCTION DESIGN MODIFICATIONS		
A	10420	10500 TOOL PLANNING DESIGN & MANUFACTURE	50	-0
A	10420	10440 WIND TUNNEL DRAG TESTS	100	-0
A	10420	10470 CONDUCT STATIC ARTICLE TESTS	110	-0
A	10420	10480 FATIGUE ARTICLE TEST PLANNING	1300	-0
A	10420	10720 ENGINE TEST DESIGN MODIFICATIONS	300	-0
A	10420	10730 W2C TEST PLANNING	50	-0
A	10420	10770 PREPARE VENDOR SPECS	50	-0
A	10420	10840 DETERMINE PRELIM DESIGN LOADS	12	-0
A	10420	10870 GUN LOCATION DETERMINATION	90	-0
A	10420	10900 PREPARE AVIONICS ORDERS	100	-0
A	10420	10910 INITIAL COST VERIFICATION	200	-0
			500	-0

UNCLASSIFIED



A	10420	10420 CONTRACT MONITORING & PLANNING	492	-0
A	10420	10900 SPECIFICATION UPDATING	96	-0
A	10420	11010 PREPARE TRAINING PLANS	60	-0
A	10430	10430 ENGINE CONTRACT AWARD TO GE		
1342				
A	10430	11140 PRELIM MODIFICATION TO ENGINE DESIGN	66	-0
A	10440	10440 GUN COMPETITIVE SHOOTOFF BEGINS		
1352				
A	10440	10480 GUN COMPETITIVE FLYOFF	120	-0
A	10450	10480 GUN COMPETITIVE SHOOTOFF ENDS		
1362				
A	10480	10480 GUN COMPETITIVE FLYOFF EVAL & SELECTIONS	60	-0
A	10480	11080 GE SELECTED FOR GUN PSD		
1372				
A	10470	10470 FINAL CONTRACT PREP & NEGOTIATION	60	-0
A	10470	10470 CONTRACT AWARD TO GE FOR GUN		
1382				
A	10470	11100 PRELIM MODIFICATION TO GUN DESIGN	62	-0
A	10480	10480 DESIGN LAYOUTS COMPLETE		
1392				
A	10480	10480 FINALIZE MAJOR COMPONENT DESIGN	60	-0
A	10490	10490 MAJOR FORGING RELEASE		
1402				
A	10490	10500 FINALIZE DESIGN	60	-0
A	10490	10510 MANUFACTURE AND DELIVER FORGINGS	376	-0
A	10500	0000 --ENTRY--	0	0
A	10500	10500 DESIGN FREEZE		
1412				
A	10500	10520 PREPARE STRUCTURAL DRAWINGS	306	-0
A	10510	10510 RECEIVE FORGINGS		
1422				
A	10510	10570 ASSEMBLE MAJOR COMPONENTS	60	-0
A	10520	10580 RELEASE STRUCTURAL DRAWINGS		
1432				
A	10530	10530 PREPARE FINAL ASSEMBLY PLANS & JIGS	222	-0
A	10530	10530 STRUCTURAL ASSEMBLY MANUFACTURE		
1442				
A	10530	10600 FINAL ASSEMBLY A/C #1	60	-0

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A	10540	10540 TOOL PLANNING, DESIGN & MANUFACTURE COMP		
	1-77			
A	10540	10550 TOOL RELEASE & SET-UP	44	-0
A	10550	10550 RELEASE TOOLS		
	1-82			
A	10550	10560 DEVELOP MANUFACTURING DETAILS	44	-0
A	10560	10560 MANUFACTURING DETAILS COMPLETE		
	1-72			
A	10570	10570 MANUFACTURE COMPONENTS	178	-0
A	10570	10570 ASSEMBLE SUBSTRUCTURE	304	-0
A	10570	10570 STRUCTURAL ASSEMBLY COMP		
	1-82			
A	10580	10580 FINAL ASSEMBLY A/C #1 COMPLETE		
	1-82			
A	10590	10590 GROUND TESTING	88	-0
A	10590	10590 GROUND TEST COMPLETE		
	1-82			
A	10600	10600 PREPARATION FOR FIRST FLIGHT	88	-0
A	10600	10600 FIRST FLIGHT A/C #1 (PREPROD)		
	1-82			
A	10610	10610 PREPRODUCTION AIRCRAFT CONSTRUCTION	425	-0
A	10610	10620 INITIAL AIRCRAFT TESTING & DELIVERY	82	-0
A	10610	10610 DELIVER A/C #1 (PREPROD)		
	1-82			
A	10610	10630 DELIVERY & TEST OF LAST PREPROD A/C	672	-0
A	10610	10700 MANUFACTURE PRODUCTION A/C #1	15	-0
A	10620	10620 START OTAS TESTING		
	1-82			
A	10620	10630 OTAS OF PREPRODUCTION AIRCRAFT	1000	-0
A	10630	10630 COMPLETE OTAS TESTING		
	1-82			
A	10630	10800 --COMPT--	0	-0
A	10640	10800 COMPLETE WIND TUNNEL TESTS		
	1-82			
A	10640	10650 STORE SEPARATION TESTS	822	-0
A	10650	10650 STORE SEPARATION TEST COMPLETE		
	1-82			
A	10660	10660 FLUTTER TESTS	240	-0
A	10660	10660 --COMPT--	0	-0

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A	10600	10600 COMPLETE FLUTTER TESTS		
	10600			
A	10670	10670 --DUMMY--	0	-0
A	10670	10670 STATIC ARTICLE TESTS COMPLETE		
	10670			
A	10680	10680 FATIGUE ARTICLE TEST PLANNING COMP		
	10680			
A	10690	10690 FATIGUE ARTICLE FABRICATION & ASSEMBLY	642	-0
A	10690	10690 FINAL ASSEMBLY COMPLETE		
	10690			
A	10700	10700 FATIGUE TESTING	240	-0
A	10700	10700 1 LIFE TIME FATIGUE TESTING COMP		
	10700			
A	10710	10710 FATIGUE TESTING CONTINUES	222	-0
A	10710	10710 2 LIFE TIMES FATIGUE TESTING COMP		
	10710			
A	10720	10720 FATIGUE TESTING CONTINUES	252	-0
A	10720	10720 --DUMMY--	0	-0
A	10730	10730 4 LIFE TIMES FATIGUE TESTING COMP		
	10730			
A	10740	10740 STRESS TESTS DESIGN HODS COMP		
	10740			
A	10750	10750 STRESS STRUCTURAL TESTS	242	-0
A	10750	10750 STRESS STRUCTURAL TESTS COMP		
	10750			
A	10760	10760 STRESS TRACK TESTS	210	-0
A	10760	10760 --DUMMY--	0	-0
A	10760	10760 STRESS TRACK TESTS COMP		
	10760			
A	10770	10770 HSEC TEST PLANNING COMP		
	10770			
A	10780	10780 CONDUCT HSEC TESTS	1200	-0
A	10780	10780 --DUMMY--	0	-0
A	10790	10790 HSEC TESTS COMPLETE		
	10790			
A	10770	10770 RELEASE VENDOR SPECS		
	10770			
A	10770	10770 --DUMMY--	0	-0
A	10770	10770 VENDOR REPLY & EVALUATION	60	-0
A	10780	10780 ISSUE RFP		
	10780			
	10780			

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A	10700	10800 PREPARE VENDOR CONTRACT	70	-0
A	10700	10700 SELECT VENDOR		
1712				
A	10700	10800 FINAL CONTRACT NEGOTIATIONS	10	-0
A	10700	10800 PREPARE INSTALLATION DRAWINGS	500	-0
A	10800	10800 ISSUE PURCHASE ORDER		
1722				
A	10800	10820 MANUFACTURE & TEST COMPONENTS	500	-0
A	10810	10530 --GUMPT--		-0
A	10810	10810 RELEASE INSTALLATION DRAWINGS		
1732				
A	10810	10820 MANUFACTURE & TEST COMPONENTS	512	-0
A	10820	10820 --GUMPT--		-0
A	10820	10820 QUALIFICATION TESTS COMPLETE		
1742				
A	10820	10820 INSTALL COMPONENTS	50	-0
A	10820	10820 RECEIVE COMPONENTS		
1702				
A	10840	10840 --GUMPT--	0	-0
A	10840	10840 PRELIM DESIGN LOADS & CRITERIA SET		
1762				
A	10840	10850 DETERMINE FINAL DESIGN LOADS	202	-0
A	10850	10820 --GUMPT--	0	-0
A	10850	10850 FINAL DESIGN LOADS & CRITERIA SET		
1772				
A	10850	10860 VIBRATION & ACOUSTIC ANALYSIS	200	-0
A	10860	10820 --GUMPT--	0	-0
A	10860	10860 VIBRATION & ACOUSTIC ANALYSIS COMPLETE		
1782				
A	10870	10870 GUN LOCATION PREPARE		
1792				
A	10870	10880 PREPARE GUN INSTALLATION DRAWINGS	400	-0
A	10880	10890 GUN GROUNDCHECKS	202	-0
A	10880	10880 GUN INSTALLATION DRAWINGS COMPLETE		
1812				
A	10880	10880 AVIONICS LONG LEAD ORDERS RELEASED		
1812				
A	10880	10880 AVIONICS INTEGRATION & TESTING	402	-0

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A	10800	11000 NEGOTIATE ORDER	22	-0
A	10900	10900 --BUNNY--	0	-0
	10900	10900 AVIONICS INTEGRATION & TESTING COMPLETE		
	1022	3 2		
A	10910	10910 DESIGN TO COST DEMO COMPLETE		
	1032	1 9		
A	10910	11700 REVIEW PRELIM FSD DATA	142	-0
A	10910	11220 PREPARE LONG LEAD ORDER #1	340	-0
A	10920	10920 FOR		
	1042	1 9		
A	10920	10920 CONTRACT MONITORING & PLANNING	152	-0
A	10930	10930 FOR		
	1052	1 9		
A	10930	10930 CONTRACT MONITORING & PLANNING	66	-0
A	10940	10940 FOR		
	1062	1 9		
A	10940	10940 CONTRACT MONITORING & PLANNING	242	-0
A	10950	10950 CONTRACT MONITORING & PLANNING	66	-0
A	1/ 10	10960 SAFETY INSPECTION		
	1072	3 3		
A	10960	10960 SPEC UPDATE		
	1082	3 3		
A	10960	10970 DETERMINE GUN INTERFERENCE DATA	120	-0
A	10970	10970 PRELIM GUN INTERFERENCE DATA COMP		
	1092	1 9		
A	10970	10980 ARMOR ANALYSIS	202	-0
A	10980	10980 ARMOR ANALYSIS COMPLETE		
	1032	2 9		
A	10980	10990 VULNERABLE AREA ANALYSIS	922	-0
A	10990	10990 VULNERABLE AREA ANALYSIS		
	1012	1 9		
A	10990	11000 DETERMINE FINAL GUN INTERFERENCE DATA	200	-0
A	11000	10930 --BUNNY--	0	-0
A	11000	11000 FINAL GUN INTERFERENCE SPEC		
	1022	1 9		
A	11010	11010 THIRTING PLANS COMPLETE		
	1032	1 9		
A	11010	11020 PRELIM DESIGN OF FORMAL MINT JMWV SYS	132	-0
A	11020	11020 FORMAL MTS DESIGN		
	1042	1 9		

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A	11020	11030 FINAL NTS DESIGN	22.	-0
A	11030	11030 NTS DESIGN FREEZE		
1702				
A	11030	11040 FINALIZE NTS DESIGN DETAILS	179	-0
A	11040	11040 NTS PDR		
1902				
A	11040	11050 NTS PLANNING & DESIGN REVIEW	11.	-0
A	11050	11050 NTS COR		
1972				
A	11050	11060 NTS CONSTRUCTION	942	-0
A	11060	11060 NTS PCA/FCA		
1982				
A	11060	11070 NTS FINAL DETAILING & DELIVERY	66	-0
A	11070	10630 --SUNNY--	8	-0
A	11070	11070 DELIVERY OF NTS		
1992				
A	11060	11080 CPRE ORDERED		
2002				
A	11060	11090 MANUFACTURE & DELIVER AVIONICS	302	-0
A	11090	10980 INSTALL AVIONICS	132	-0
A	11090	11090 CPRE RECEIVED		
2012				
A	11100	11100 SUN PDR		
2022				
A	11100	11110 PREPRODUCTION GUN FABRICATION	106	-0
A	11110	11110 RECEIVE PHASE I GUN		
2122				
A	11110	11120 FINALIZE GUN DESIGN	420	-0
A	11120	11120 GUN COR		
2142				
A	11120	11130 TEST & QUALIFY GUN	216	-0
A	11130	10630 --SUNNY--	0	-0
A	11130	11130 GUN GVAL TESTS COMPLETE		
2152				
A	11130	11000 CONTINUING GUN PRODUCTION & DELIVERY	1296	-0
A	11140	11140 ENGINE HARDWARE DESIGN COMP		
2162				
A	11140	11150 FINALIZE ENGINE DESIGN	112	-0
A	11150	11150 ENGINE COR		
2172				

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A	11160	11160 PRELIM ENGINE TESTING	300	-0
A	11160	11160 AEPG ENGINE EXPLORATORY TESTS COMP		
2132				
A	11170	11170 ENGINE QUALIFICATION TESTING	100	-0
A	11170	11170 AEPG QUAL TESTS COMP		
2132				
A	11170	11180 PREPRODUCTION ENGINE FABRICATION	60	-0
A	11170	11180 ENGINE QUALIFICATION TESTING	120	-0
A	11180	11180 RECEIVE ENGINE #1		
2132				
A	11180	11190 PREPRODUCTION ENGINE TESTING	80	-0
A	11190	10630 --DUPY--	6	-0
A	11190	11190 MFT APPROVAL		
2132				
A	11200	12000 CONTINUING ENGINE PRODUCTION & DELIVERY	1200	-0
A	11200	11200 OSAC ITIA		
2132				
A	11200	11210 NOTIFICATION OF OSAC RECOMMENDATIONS	20	-0
A	11210	11210 AUTHORIZATION FOR INITIAL PRODUCTION		
2132				
A	11210	11220 AUTHORIZE LONG LEAD ORDER	120	-0
A	11210	11210 OSAC ITIA		
2132				
A	11210	11270 NOTIFICATION OF OSAC RECOMMENDATIONS	20	-0
A	11270	11220 LONG LEAD ITEMS OPT 2 FUNDING POINT		
2132				
A	11220	11220 PREPARE LONG LEAD ORDER #2	270	-0
A	11220	11270 --DUPY--	0	-0
A	11230	11220 LONG LEAD ITEMS OPT 2 FUNDING POINT		
2132				
A	11230	11240 PROGRAM COST VERIFICATION	20	-0
A	11240	11210 REVIEW OF PSD DATA	232	-0
A	11240	11240 DESIGN TO COST DEMO		
2172				
A	11240	11250 REVIEW OF TEST DATA		
A	11250	11250 FOR		
2162				
A	11250	11260 REVIEW OF PSD DATA	60	-0

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A	11260	11215 PREPARATION FOR DEARB REVIEW		
A	11260	11220 FOR	8.	-0
2112				
A	11270	11270 FOTSS PROGRAM START		
2212				
A	11270	11280 FOTSS		
A	11280	11280 FOTSS PROGRAM END (PHASE 1)	320	-0
2212				
A	11280	11280 INITIAL OPERATIONAL CARE TRAINING & UJM		
A	11290	11270 TOWEE	320	-0
A	11290	11290 1ST PRODUCTION A/C DELIVERY	210	-0
2212				
A	11290	11210 EJECT TEST & TRAINING UNITS		
A	11290	12000 CONTINUING AIRCRAFT PRODUCTION	770	-0
A	11300	11300 OPERATIONAL UNIT IOC	000	-0
2212				
A	11310	12000 --DU--		
A	11310	2000 SAFAP ACTION TO MEET IOC (PRELUDE)	0	-0
A	11320	11300 FINAL PREPARATION & COORDINATION	0	0
A	11310	11310 SAFAP ACTIVATED	200	-0
2212				
A	12000	12000 DUMMY NETWORK END		
2212				

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TEAM- JAN 1, YEAR GCL  
REPORT DATE- 1/1/79  
RELEASE DATE- 1/1/79

INCLASSIFIED

REPORTING ORG.  
ACTIVITY REPORT  
CONTRACT NO.  
831

INTEGRATED INFORMATION REPORT  
1ST SGT REV  
2ND SGT REV  
3RD SGT REV  
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7TH SGT REV  
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100TH SGT REV

EVENT	DATE	ACTIVITY DESCRIPTION	PRJ.	TIME ELAPSED	ALLOWED	DATE	COMPSCHET	BLANK	TIME	ORG.
3700	11/19/73	3700	11/19/73	4/11/74						
3800	11/19/73	3800	11/19/73	4/11/74						
3900	11/19/73	3900	11/19/73	4/11/74						
4000	11/19/73	4000	11/19/73	4/11/74						
4100	11/19/73	4100	11/19/73	4/11/74						
4200	11/19/73	4200	11/19/73	4/11/74						
4300	11/19/73	4300	11/19/73	4/11/74						
4400	11/19/73	4400	11/19/73	4/11/74						
4500	11/19/73	4500	11/19/73	4/11/74						
4600	11/19/73	4600	11/19/73	4/11/74						
4700	11/19/73	4700	11/19/73	4/11/74						
4800	11/19/73	4800	11/19/73	4/11/74						
4900	11/19/73	4900	11/19/73	4/11/74						
5000	11/19/73	5000	11/19/73	4/11/74						
5100	11/19/73	5100	11/19/73	4/11/74						
5200	11/19/73	5200	11/19/73	4/11/74						
5300	11/19/73	5300	11/19/73	4/11/74						
5400	11/19/73	5400	11/19/73	4/11/74						
5500	11/19/73	5500	11/19/73	4/11/74						
5600	11/19/73	5600	11/19/73	4/11/74						
5700	11/19/73	5700	11/19/73	4/11/74						
5800	11/19/73	5800	11/19/73	4/11/74						
5900	11/19/73	5900	11/19/73	4/11/74						
6000	11/19/73	6000	11/19/73	4/11/74						
6100	11/19/73	6100	11/19/73	4/11/74						
6200	11/19/73	6200	11/19/73	4/11/74						
6300	11/19/73	6300	11/19/73	4/11/74						
6400	11/19/73	6400	11/19/73	4/11/74						
6500	11/19/73	6500	11/19/73	4/11/74						
6600	11/19/73	6600	11/19/73	4/11/74						
6700	11/19/73	6700	11/19/73	4/11/74						
6800	11/19/73	6800	11/19/73	4/11/74						
6900	11/19/73	6900	11/19/73	4/11/74						
7000	11/19/73	7000	11/19/73	4/11/74						
7100	11/19/73	7100	11/19/73	4/11/74						
7200	11/19/73	7200	11/19/73	4/11/74						
7300	11/19/73	7300	11/19/73	4/11/74						
7400	11/19/73	7400	11/19/73	4/11/74						
7500	11/19/73	7500	11/19/73	4/11/74						
7600	11/19/73	7600	11/19/73	4/11/74						
7700	11/19/73	7700	11/19/73	4/11/74						
7800	11/19/73	7800	11/19/73	4/11/74						
7900	11/19/73	7900	11/19/73	4/11/74						
8000	11/19/73	8000	11/19/73	4/11/74						
8100	11/19/73	8100	11/19/73	4/11/74						
8200	11/19/73	8200	11/19/73	4/11/74						
8300	11/19/73	8300	11/19/73	4/11/74						
8400	11/19/73	8400	11/19/73	4/11/74						
8500	11/19/73	8500	11/19/73	4/11/74						
8600	11/19/73	8600	11/19/73	4/11/74						
8700	11/19/73	8700	11/19/73	4/11/74						
8800	11/19/73	8800	11/19/73	4/11/74						
8900	11/19/73	8900	11/19/73	4/11/74						
9000	11/19/73	9000	11/19/73	4/11/74						
9100	11/19/73	9100	11/19/73	4/11/74						
9200	11/19/73	9200	11/19/73	4/11/74						
9300	11/19/73	9300	11/19/73	4/11/74						
9400	11/19/73	9400	11/19/73	4/11/74						
9500	11/19/73	9500	11/19/73	4/11/74						
9600	11/19/73	9600	11/19/73	4/11/74						
9700	11/19/73	9700	11/19/73	4/11/74						
9800	11/19/73	9800	11/19/73	4/11/74						
9900	11/19/73	9900	11/19/73	4/11/74						
10000	11/19/73	10000	11/19/73	4/11/74						

INCLASSIFIED



155

UNCLASSIFIED  
PERI/TIME  
ACTIVITY REPORT  
REPORTING ORGN. CONTRACT NO.  
0-1

TECH- JAN 11 YEAR CAL  
REPORT DATE- 12/1/79  
RELEASE DATE- 12/1/79

INTE- ATC ACQUISITION OF REFERENCE  
1ST SUB-REV 000000000000000000  
2ND SUB-REV 000000000000000000  
3RD SUB-REV 000000000000000000  
4TH SUB-REV 000000000000000000

PR. Q.	ACTIVITY DESCRIPTION	PROB. TIME	EXPECTED DATE	COMP/SCHEM	DATE	SLACK	REMAINING
10730	10730 000000000000000000	21.0	3/27/79	0/2/79	105.0	22.0	105.0
10740	10740 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10750	10750 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10760	10760 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10770	10770 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10780	10780 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10790	10790 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10800	10800 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10810	10810 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10820	10820 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10830	10830 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10840	10840 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10850	10850 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10860	10860 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10870	10870 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10880	10880 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10890	10890 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10900	10900 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10910	10910 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10920	10920 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10930	10930 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10940	10940 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10950	10950 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10960	10960 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10970	10970 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10980	10980 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
10990	10990 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11000	11000 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11010	11010 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11020	11020 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11030	11030 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11040	11040 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0
11050	11050 000000000000000000	15.0	3/27/79	0/2/79	105.0	22.0	105.0

UNCLASSIFIED



UNCLASSIFIED

PLR/TIME

RELEASE DATE: 10/10/69

REPORTING ORGN: CONTRACT NO. 001

REPORT DATE: 11/10/69

INTEGRATED ACQUISITION NETWORK

LEVEL/SUMMARY ITEM 2/

EVENT NO.	EVENT DESCRIPTION	MILESTON CODE	EXPECTED DATE	LATEST DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
100	FACILITY REQUISITIONING BY CONTR	1	9/ 1/73	2/21/73			-27.0
200	BASE REQUISITIONING REPORT	2	9/12/73	2/21/73			-27.0
300	FACILITY CONSTRUCTION	3	10/16/73	3/29/73			-27.0
400	BASE REQUISITIONING FACILITY CONSTR	4	11/16/73	3/29/73			-27.0
500	CALL REQUISITIONING	5	12/11/73	3/29/73			-27.0
600	INITIAL CONSTRUCTION BY MAJCOM	6	2/ 5/74	7/13/73	9/ 1/73		-27.0
700	INITIAL CONSTRUCTION BY MAJCOM	7	2/ 5/74	7/13/73	9/ 1/73		-27.0
800	INITIAL CONSTRUCTION BY MAJCOM	8	2/ 5/74	7/13/73	9/ 1/73		-27.0
900	INITIAL CONSTRUCTION BY MAJCOM	9	2/ 5/74	7/13/73	9/ 1/73		-27.0
1000	INITIAL CONSTRUCTION BY MAJCOM	10	2/ 5/74	7/13/73	9/ 1/73		-27.0
1100	INITIAL CONSTRUCTION BY MAJCOM	11	2/ 5/74	7/13/73	9/ 1/73		-27.0
1200	INITIAL CONSTRUCTION BY MAJCOM	12	2/ 5/74	7/13/73	9/ 1/73		-27.0
1300	INITIAL CONSTRUCTION BY MAJCOM	13	2/ 5/74	7/13/73	9/ 1/73		-27.0
1400	INITIAL CONSTRUCTION BY MAJCOM	14	2/ 5/74	7/13/73	9/ 1/73		-27.0
1500	INITIAL CONSTRUCTION BY MAJCOM	15	2/ 5/74	7/13/73	9/ 1/73		-27.0
1600	INITIAL CONSTRUCTION BY MAJCOM	16	2/ 5/74	7/13/73	9/ 1/73		-27.0
1700	INITIAL CONSTRUCTION BY MAJCOM	17	2/ 5/74	7/13/73	9/ 1/73		-27.0
1800	INITIAL CONSTRUCTION BY MAJCOM	18	2/ 5/74	7/13/73	9/ 1/73		-27.0
1900	INITIAL CONSTRUCTION BY MAJCOM	19	2/ 5/74	7/13/73	9/ 1/73		-27.0
2000	INITIAL CONSTRUCTION BY MAJCOM	20	2/ 5/74	7/13/73	9/ 1/73		-27.0
2100	INITIAL CONSTRUCTION BY MAJCOM	21	2/ 5/74	7/13/73	9/ 1/73		-27.0
2200	INITIAL CONSTRUCTION BY MAJCOM	22	2/ 5/74	7/13/73	9/ 1/73		-27.0
2300	INITIAL CONSTRUCTION BY MAJCOM	23	2/ 5/74	7/13/73	9/ 1/73		-27.0
2400	INITIAL CONSTRUCTION BY MAJCOM	24	2/ 5/74	7/13/73	9/ 1/73		-27.0
2500	INITIAL CONSTRUCTION BY MAJCOM	25	2/ 5/74	7/13/73	9/ 1/73		-27.0
2600	INITIAL CONSTRUCTION BY MAJCOM	26	2/ 5/74	7/13/73	9/ 1/73		-27.0
2700	INITIAL CONSTRUCTION BY MAJCOM	27	2/ 5/74	7/13/73	9/ 1/73		-27.0
2800	INITIAL CONSTRUCTION BY MAJCOM	28	2/ 5/74	7/13/73	9/ 1/73		-27.0
2900	INITIAL CONSTRUCTION BY MAJCOM	29	2/ 5/74	7/13/73	9/ 1/73		-27.0
3000	INITIAL CONSTRUCTION BY MAJCOM	30	2/ 5/74	7/13/73	9/ 1/73		-27.0
3100	INITIAL CONSTRUCTION BY MAJCOM	31	2/ 5/74	7/13/73	9/ 1/73		-27.0
3200	INITIAL CONSTRUCTION BY MAJCOM	32	2/ 5/74	7/13/73	9/ 1/73		-27.0
3300	INITIAL CONSTRUCTION BY MAJCOM	33	2/ 5/74	7/13/73	9/ 1/73		-27.0
3400	INITIAL CONSTRUCTION BY MAJCOM	34	2/ 5/74	7/13/73	9/ 1/73		-27.0
3500	INITIAL CONSTRUCTION BY MAJCOM	35	2/ 5/74	7/13/73	9/ 1/73		-27.0
3600	INITIAL CONSTRUCTION BY MAJCOM	36	2/ 5/74	7/13/73	9/ 1/73		-27.0
3700	INITIAL CONSTRUCTION BY MAJCOM	37	2/ 5/74	7/13/73	9/ 1/73		-27.0
3800	INITIAL CONSTRUCTION BY MAJCOM	38	2/ 5/74	7/13/73	9/ 1/73		-27.0
3900	INITIAL CONSTRUCTION BY MAJCOM	39	2/ 5/74	7/13/73	9/ 1/73		-27.0
4000	INITIAL CONSTRUCTION BY MAJCOM	40	2/ 5/74	7/13/73	9/ 1/73		-27.0
4100	INITIAL CONSTRUCTION BY MAJCOM	41	2/ 5/74	7/13/73	9/ 1/73		-27.0
4200	INITIAL CONSTRUCTION BY MAJCOM	42	2/ 5/74	7/13/73	9/ 1/73		-27.0
4300	INITIAL CONSTRUCTION BY MAJCOM	43	2/ 5/74	7/13/73	9/ 1/73		-27.0
4400	INITIAL CONSTRUCTION BY MAJCOM	44	2/ 5/74	7/13/73	9/ 1/73		-27.0
4500	INITIAL CONSTRUCTION BY MAJCOM	45	2/ 5/74	7/13/73	9/ 1/73		-27.0

UNCLASSIFIED

FROM JAN 10 YEAR CAL  
REPORT DATE 1.11.69

REPORTING ORGN.	CONTRACT NO.
WFO	WFO

INTEGRATED / COMPOSITION 20  
LEVEL / TIMING 114 20

RELEASE DATE, 1-11-76

[illegible]

RECALCULATED IL RISON: STAY OF 14YR CALANDAR  
1010100 SSA ELEMENTS TO COGNITIVE PROTO STRAT 1:9

**CALCULATE IL BEFORE START OF 1 YR CALNDAR**

10190 PAVIS:D U-AFI D'0 9, COATED

FOR CALCULATION BEFORE START OF 1974 CALANDAK

10200 n5APC 05 V1E4 C349LET=

CALCULATED TO BELOW: 5710° OF 1016 CALANDAR

10210 FINAL DCP 220 COMPL - YES

CALCULATED IN REFERENCE TO SYSTEM OF 1941 CALENDAR

06220 DCP ZKA APPROVE) 3V OUTPUT SEC

CALCULATED TO REFLECT STATE OF 1976 COLUMBIA

40 10115 76427 01143067M 0 MS1 QD 0561 0

00200 X-V GDS 1700 15 JUL 55

**DECLASSIFIED**



UNCLASSIFIED

PERIOD

MILESTONE REPORT

CONTRACT NO.

001

TEAM JAN 11 YEAR CAL  
REPORT DATE: 11/17/69

REPORTING ORGN.

AFIT/LS

INTEGRATED ACQUISITION REPORT

27

LEVEL/SUMMARY ITEM

RELEASE DATE: 11/10/69

EVENT NO.	DESCRIPTION	MILESTONE CODE	EXPECTED DATE	ACTUAL DATE	SLACK
10250	REP ISSUED TO INDUSTRY	116	5/ 8/76	5/ 21/76	-27.8
10260	11600 SP TO NEW DELIVERED	117	8/12/76	8/12/76	-27.8
10270	11600 C160 CONTRACTS NEGOTIATED TO SSA	118	10/22/76	10/22/76	-27.8
10280	11600 C160 CONTRACTS NEGOTIATED TO INDUSTRY	119	8/20/76	8/20/76	-27.8
10290	11600 C160 I	120	12/15/76	12/15/76	-27.8
10300	11600 C160 I SELECTED FOR COM PROTOTYPE	121	12/16/76	12/16/76	-27.8
10310	11600 C160 I SELECTED FOR COM PROTOTYPE	122	12/22/76	12/22/76	-27.8
10320	11600 C160 I SELECTED FOR COM PROTOTYPE	123	2/26/77	2/26/77	-27.8
10330	11600 C160 I SELECTED FOR COM PROTOTYPE	124	6/30/77	6/30/77	-27.8
10340	11600 C160 I SELECTED FOR COM PROTOTYPE	125	11/19/77	11/19/77	-27.8
10350	11600 C160 I SELECTED FOR COM PROTOTYPE	126	11/19/77	11/19/77	-27.8
10360	11600 C160 I SELECTED FOR COM PROTOTYPE	127	11/19/77	11/19/77	-27.8
10370	11600 C160 I SELECTED FOR COM PROTOTYPE	128	11/19/77	11/19/77	-27.8
10380	11600 C160 I SELECTED FOR COM PROTOTYPE	129	11/19/77	11/19/77	-27.8
10390	11600 C160 I SELECTED FOR COM PROTOTYPE	130	11/19/77	11/19/77	-27.8
10400	11600 C160 I SELECTED FOR COM PROTOTYPE	131	11/19/77	11/19/77	-27.8
10410	11600 C160 I SELECTED FOR COM PROTOTYPE	132	11/19/77	11/19/77	-27.8
10420	11600 C160 I SELECTED FOR COM PROTOTYPE	133	11/19/77	11/19/77	-27.8
10430	11600 C160 I SELECTED FOR COM PROTOTYPE	134	11/19/77	11/19/77	-27.8
10440	11600 C160 I SELECTED FOR COM PROTOTYPE	135	11/19/77	11/19/77	-27.8
10450	11600 C160 I SELECTED FOR COM PROTOTYPE	136	11/19/77	11/19/77	-27.8
10460	11600 C160 I SELECTED FOR COM PROTOTYPE	137	11/19/77	11/19/77	-27.8
10470	11600 C160 I SELECTED FOR COM PROTOTYPE	138	11/19/77	11/19/77	-27.8
10480	11600 C160 I SELECTED FOR COM PROTOTYPE	139	11/19/77	11/19/77	-27.8
10490	11600 C160 I SELECTED FOR COM PROTOTYPE	140	11/19/77	11/19/77	-27.8
10500	11600 C160 I SELECTED FOR COM PROTOTYPE	141	11/19/77	11/19/77	-27.8
10510	11600 C160 I SELECTED FOR COM PROTOTYPE	142	11/19/77	11/19/77	-27.8
10520	11600 C160 I SELECTED FOR COM PROTOTYPE	143	11/19/77	11/19/77	-27.8
10530	11600 C160 I SELECTED FOR COM PROTOTYPE	144	11/19/77	11/19/77	-27.8
10540	11600 C160 I SELECTED FOR COM PROTOTYPE	145	11/19/77	11/19/77	-27.8
10550	11600 C160 I SELECTED FOR COM PROTOTYPE	146	11/19/77	11/19/77	-27.8
10560	11600 C160 I SELECTED FOR COM PROTOTYPE	147	11/19/77	11/19/77	-27.8
10570	11600 C160 I SELECTED FOR COM PROTOTYPE	148	11/19/77	11/19/77	-27.8
10580	11600 C160 I SELECTED FOR COM PROTOTYPE	149	11/19/77	11/19/77	-27.8
10590	11600 C160 I SELECTED FOR COM PROTOTYPE	150	11/19/77	11/19/77	-27.8
10600	11600 C160 I SELECTED FOR COM PROTOTYPE	151	11/19/77	11/19/77	-27.8
10610	11600 C160 I SELECTED FOR COM PROTOTYPE	152	11/19/77	11/19/77	-27.8
10620	11600 C160 I SELECTED FOR COM PROTOTYPE	153	11/19/77	11/19/77	-27.8
10630	11600 C160 I SELECTED FOR COM PROTOTYPE	154	11/19/77	11/19/77	-27.8
10640	11600 C160 I SELECTED FOR COM PROTOTYPE	155	11/19/77	11/19/77	-27.8
10650	11600 C160 I SELECTED FOR COM PROTOTYPE	156	11/19/77	11/19/77	-27.8

UNCLASSIFIED

UNCLASSIFIED  
PER/TIME  
MILESTONE REPORT  
CONTRACT NO.  
001  
TERM JAN 10 YEAR CAL  
REPORT DATE- 3/10/69

UNCLASSIFIED  
PER/TIME  
MILESTONE REPORT  
CONTRACT NO.  
001  
TERM JAN 10 YEAR CAL  
REPORT DATE- 3/10/69

INTEGRATED ACQUISITION NETWORK  
LEVEL/SUMMARY ITEM 2/

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	ACTUAL DATE	SLACK
10660	COMPLETE FLIGHT TEST	137	6/10/74	4/21/76	111.0
10670	STATIC AIRFIELD TEST COMPLETE	138	7/1/75	7/3/78	153.0
10680	FATIGUE AIRFIELD TEST PLANNING COMP	139	9/7/73	9/7/73	101.0
10690	FINAL ASSEMBLY COMPLETE	140	11/21/76	11/21/76	101.0
10700	1 LIFE TIME FATIGUE TESTING COMP	141	7/31/78	7/21/77	101.0
10710	2 LIFE TIMES FATIGUE TESTING COMP	142	1/1/81	12/29/77	101.0
10720	4 LIFE TIMES FATIGUE TESTING COMP	143	7/1/81	7/3/78	101.0
10730	6 LIFE TIMES FATIGUE TESTING COMP	144	10/22/73	11/16/78	111.0
10740	8 LIFE TIMES FATIGUE TESTING COMP	145	4/10/73	5/9/72	111.0
10750	10 LIFE TIMES FATIGUE TESTING COMP	146	3/27/74	4/20/76	111.0
10760	12 LIFE TIMES FATIGUE TESTING COMP	147	3/19/73	5/21/75	111.0
10770	14 LIFE TIMES FATIGUE TESTING COMP	148	5/4/76	7/3/78	111.0
10780	16 LIFE TIMES FATIGUE TESTING COMP	149	3/13/73	4/16/74	72.0
10790	18 LIFE TIMES FATIGUE TESTING COMP	150	3/13/73	4/16/74	72.0
10800	20 LIFE TIMES FATIGUE TESTING COMP	151	6/24/73	9/30/74	72.0
10810	22 LIFE TIMES FATIGUE TESTING COMP	152	9/1/73	1/7/74	72.0
10820	24 LIFE TIMES FATIGUE TESTING COMP	153	9/21/74	1/5/76	82.0
10830	26 LIFE TIMES FATIGUE TESTING COMP	154	8/9/74	7/3/78	198.0
10840	28 LIFE TIMES FATIGUE TESTING COMP	155	6/24/74	12/1/78	72.0
10850	30 LIFE TIMES FATIGUE TESTING COMP	156	5/1/73	1/16/74	72.0
10860	32 LIFE TIMES FATIGUE TESTING COMP	157	10/1/74	7/25/75	72.0
10870	34 LIFE TIMES FATIGUE TESTING COMP	158	7/13/73	12/28/74	191.0
10880	36 LIFE TIMES FATIGUE TESTING COMP	159	9/21/74	1/28/75	73.0
10890	38 LIFE TIMES FATIGUE TESTING COMP	160	7/27/73	1/8/75	73.0
10900	40 LIFE TIMES FATIGUE TESTING COMP	161	11/7/74	4/20/76	87.0
10910	42 LIFE TIMES FATIGUE TESTING COMP	162	3/27/74	12/16/75	87.0
10920	44 LIFE TIMES FATIGUE TESTING COMP	163	12/16/73	5/22/75	72.0
10930	46 LIFE TIMES FATIGUE TESTING COMP	164	3/21/74	6/25/75	72.0
10940	48 LIFE TIMES FATIGUE TESTING COMP	165	6/23/74	6/26/75	72.0
10950	50 LIFE TIMES FATIGUE TESTING COMP	166	17/14/74	3/19/76	72.0
10960	52 LIFE TIMES FATIGUE TESTING COMP	167	9/7/74	4/12/76	148.0
10970	54 LIFE TIMES FATIGUE TESTING COMP	168	7/25/73	6/28/76	148.0
10980	56 LIFE TIMES FATIGUE TESTING COMP	169	12/16/73	11/19/76	148.0
10990	58 LIFE TIMES FATIGUE TESTING COMP	170	12/16/73	11/19/76	148.0
11000	60 LIFE TIMES FATIGUE TESTING COMP	171	12/16/73	11/19/76	148.0
11010	62 LIFE TIMES FATIGUE TESTING COMP	172	4/7/75	7/3/78	149.2
11020	64 LIFE TIMES FATIGUE TESTING COMP	173	4/7/75	7/3/78	149.2
11030	66 LIFE TIMES FATIGUE TESTING COMP	174	12/13/73	11/19/76	149.2
11040	68 LIFE TIMES FATIGUE TESTING COMP	175	6/19/74	3/10/77	149.2

UNCLASSIFIED



APPENDIX G  
INTEGRATED ACQUISITION NETWORK, CRASHED  
FACILITIES SUBNETWORK

This appendix is composed of two parts. The first part is the activity report. It displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time ( $t_e$ ) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date ( $T_E$ ) for completion of the activity.

ALLOWABLE DATE - latest allowable date ( $T_L$ ) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date ( $T_A$ ) is shown preceded by the letter A. If a required completion date has been specified, that date ( $T_R$ ) is shown preceded by the letter R.

SLACK - slack for the activity ( $T_L - T_E$ )

TIME REMAINING - time from the report date until expected completion date ( $T_E$ ) of the activity.

ORG. - identification of the organization responsible for this activity.

The second part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date ( $T_E$ ) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date ( $T_L$ ) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event ( $T_A$ ).

SLACK - slack for the event ( $T_L - T_E$ ).

Page 10

## CONCLUSION

REPORTING ORGN.      ACTIVITY REPORT      CONTACT NO.

CENTREY INC.

[illegible]

**Figure 1**

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## TABLE

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1. 11/11/1919.

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PERTINENT

MILESTONE REPORT

REPORTING ORGN.

CONTACT NO.

411

INVESTIGATED ACQUISITION METHOD

AFIT/LS

LEVEL/SUPPLY ITEM

27

PAGE

FORM 148 1-70 (REV. 1-70)

1000 1-70 1-70 1-70

RELEASE DATE/1-1/70

LATEST

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REPORTING ORGN.

AFIT/LS

INTERACT. ACQUISITION NUMBER

LEWIS/SP. ADV ITEM 2/

CONTRACT NO.

6.1

TERM IN 2 YEAR 200

UPDAT DATE 1/11/77

PAGE 4

RELEASE DATE 11/11/79

EVENT NO.	DESCRIPTION	DATE	EXPECTED DATE	ALLOTTED DATE	ACTUAL DATE	STATUS
11170	ABDC DUE 11/11/79	7/30/79	7/30/79	7/30/79	7/30/79	30.4
11180	PLATE ENGINE 91	9/30/79	9/30/79	9/30/79	9/30/79	30.4
11190	MCT FORT VAL	11/1/79	11/1/79	11/1/79	11/1/79	30.4
11200	OCAC 1112	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11210	ACTING STATION FOR TITILL PRODUCTION	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11215	OCAC 1113	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11220	LOC 1113 ITEMS OUT A BUILDING POINT	11/1/79	11/1/79	11/1/79	11/1/79	19.0
11230	LOC 1113 ITEMS OUT A BUILDING POINT	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11240	DESIGN IN 11/1/79	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11250	PLA	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11260	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11270	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11280	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11290	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11300	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11310	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11320	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11330	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11340	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11350	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11360	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11370	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11380	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11390	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11400	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11410	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11420	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11430	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11440	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11450	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11460	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11470	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11480	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11490	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11500	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11510	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11520	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11530	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11540	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11550	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11560	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11570	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11580	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11590	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11600	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11610	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11620	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11630	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11640	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11650	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11660	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11670	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11680	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11690	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11700	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11710	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11720	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11730	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11740	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11750	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11760	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11770	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11780	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11790	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11800	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11810	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11820	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11830	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11840	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11850	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11860	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11870	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11880	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11890	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11900	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11910	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11920	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11930	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11940	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11950	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11960	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11970	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11980	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0
11990	PLATE ENGINE 91	7/30/79	7/30/79	7/30/79	7/30/79	19.0

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APPENDIX H  
INTEGRATED ACQUISITION NETWORK WITH  
AMENDED PROGRAMMING PHASE

This appendix is composed of two parts. The first part is the activity report. It displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time ( $t_e$ ) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date ( $T_E$ ) for completion of the activity.

ALLOWABLE DATE - latest allowable date ( $T_L$ ) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date ( $T_A$ ) is shown preceded by the letter A. If a required completion date has been specified, that date ( $T_R$ ) is shown preceded by the letter R.

SLACK - slack for the activity ( $T_L - T_E$ )

TIME REMAINING - time from the report date until expected completion date ( $T_E$ ) of the activity.

ORG. - identification of the organization responsible for this activity.

The second part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date ( $T_E$ ) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date ( $T_L$ ) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event ( $T_A$ ).

SLACK - slack for the event ( $T_L - T_E$ ).

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AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL--ETC F/G 5/1  
A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION I--ETC(U)  
SEP 81 K P HANSEN

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AFIT-LSSR-57-81

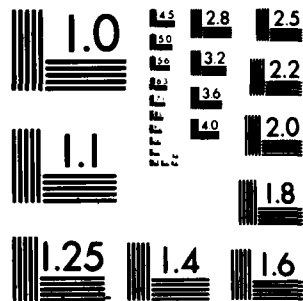
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PERFORMANCE REPORT  
ACTIVITY REPORT  
REPORTING ORG. CONTRACT NO.  
AFI/ALS 601

TERM- JAN 18 YEAR CAL  
REPORT DATE- 10/16/89  
RELEASE DATE- 10/18/89

INTEGRATED ACQUISITION NUMBER  
1ST SORT REV PRELIMINARY EVENT NO.  
2ND SORT REV SUCCESSFUL EVENT NO.  
3RD SORT REV LEAST SLACK  
4TH SORT REV EXPECTED DATE (YR)  
EVAL

SUC.	ACTIVITY DESCRIPTION	PROG.	TIME EXPECTED	DATE	DATE	DATE	SLACK	REMAINING
10200	PARTICIPATION OF RECON BY DECISION AUTH	15.6	4/ 9/78	2/16/78			-7.7	25.0
10210	FINAL YR APPROVAL	15.6	4/ 9/78	2/16/78			-7.7	25.0
10220	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10230	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10240	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10250	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10260	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10270	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10280	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10290	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10300	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10310	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10320	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10330	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10340	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10350	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10360	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10370	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10380	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10390	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10400	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10410	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10420	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10430	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10440	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10450	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10460	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10470	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10480	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10490	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10500	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10510	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10520	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10530	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10540	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10550	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10560	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10570	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10580	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10590	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10600	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10610	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10620	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10630	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10640	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10650	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10660	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10670	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10680	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10690	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10700	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10710	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10720	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10730	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10740	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10750	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10760	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10770	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10780	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10790	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10800	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10810	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10820	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10830	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10840	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10850	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10860	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10870	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10880	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10890	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10900	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10910	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10920	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10930	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10940	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10950	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10960	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10970	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10980	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
10990	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0
11000	PHD FLIGHT EVALUATION	15.6	4/ 9/78	2/16/78			-7.7	25.0

UNCLASSIFIED

03141556736

PERFORMING  
ACTIVITY REPORT  
REPORTING ORGN. CONTRACT NO.  
AFY/LS 474

TERM- JAN 14 YEAR CAL  
REPORT DATE- 10/10/69  
RELEASE DATE-10/11/69

UNCLASSIFIED ACQUISITION VERSION  
 1ST 5017 AB PUBLISHED 5-6-91 NO.  
 2ND 5007 AB SULLIVAN TIGHT NO.  
 3RD 5007 AB LEAST SLACK  
 4TH 5007 AB EXPECTED DATE 1991

SUC.	ACTIVITY DESCRIPTION	PROB.	TIME EXPECTED	ALLOWED	COMP/SCHED	SLACK	TIME
10040	PREPARE BOMBS ORDERS	10.0	7/27/73	13/27/73	11.0	193.0	
10040	INITIAL CRV APPLICATION	10.0	3/27/74	3/27/74	20.1	127.0	
10050	COMBUSTION TYPING & PLANNING	0.0	3/27/74	3/27/74	11.3	213.2	
10060	DECLARATION UPDATING	0.0	7/7/73	3/29/74	07.9	192.0	
10070	FLIGHT TRAINING PLANS	0.0	4/5/73	4/11/74	67.9	177.6	
10080	FLIGHT APPLICATION TO ENGINE DESIGN	12.0	0/4/73	0/31/73	21.3	377.0	
10090	GUN COMPETITIVE FLIGHT	0.0	0/4/73	11/5/73	21.3	105.0	
10100	GUN COMPETITIVE FLIGHT EVAL & SELECTION	1.0	0/11/73	11/12/73	21.3	195.0	
10110	FLIGHT MODIFICATION TO GUN DESIGN	0.2	0/8/73	11/1/74	21.3	195.0	
10120	FLIGHT MODIFICATION TO GUN DESIGN	0.0	6/13/73	0/31/73	11.1	107.2	
10130	FLIGHT MODIFICATION TO GUN DESIGN	0.0	7/27/73	0/4/73	11.1	191.0	
10140	FLIGHT MODIFICATION TO GUN DESIGN	17.0	1/10/73	2/16/74	16.3	244.0	
10150	FLIGHT MODIFICATION TO GUN DESIGN	0.1	7/17/73	11/16/74	16.3	191.0	
10160	FLIGHT MODIFICATION TO GUN DESIGN	30.0	2/21/74	5/10/74	11.1	222.2	
10170	FLIGHT MODIFICATION TO GUN DESIGN	22.0	7/25/74	3/17/74	10.3	270.0	
10180	FLIGHT MODIFICATION TO GUN DESIGN	0.0	9/27/74	11/19/74	7.1	252.0	
10190	FLIGHT MODIFICATION TO GUN DESIGN	0.0	0/16/73	0/4/73	7.1	195.0	
10200	FLIGHT MODIFICATION TO GUN DESIGN	0.0	9/16/73	11/6/73	7.1	200.2	
10210	FLIGHT MODIFICATION TO GUN DESIGN	17.0	1/23/74	3/14/74	7.1	218.0	
10220	FLIGHT MODIFICATION TO GUN DESIGN	30.0	6/27/74	13/17/74	7.1	240.0	
10230	FLIGHT MODIFICATION TO GUN DESIGN	0.0	12/2/74	1/23/75	7.1	261.0	
10240	FLIGHT MODIFICATION TO GUN DESIGN	2.0	12/15/74	2/6/75	7.1	263.0	
10250	FLIGHT MODIFICATION TO GUN DESIGN	42.0	1/16/75	12/9/75	7.1	306.2	
10260	FLIGHT MODIFICATION TO GUN DESIGN	0.2	2/13/75	4/17/75	0.9	271.0	
10270	FLIGHT MODIFICATION TO GUN DESIGN	0.2	2/13/75	4/23/77	9.9	373.0	
10280	FLIGHT MODIFICATION TO GUN DESIGN	1.0	1/25/75	12/19/75	7.1	307.0	
10290	FLIGHT MODIFICATION TO GUN DESIGN	10.0	3/15/77	0/20/77	0.9	374.0	
10300	FLIGHT MODIFICATION TO GUN DESIGN	0.0	2/15/77	4/20/77	0.9	376.0	
10310	FLIGHT MODIFICATION TO GUN DESIGN	22.0	1/20/73	0/15/74	10.5	206.2	
10320	FLIGHT MODIFICATION TO GUN DESIGN	10.0	4/18/74	2/6/75	4.5	231.2	
10330	FLIGHT MODIFICATION TO GUN DESIGN	0.0	7/1/75	0/20/77	10.5	231.2	
10340	FLIGHT MODIFICATION TO GUN DESIGN	12.0	1/21/74	9/1/74	10.5	231.2	
10350	FLIGHT MODIFICATION TO GUN DESIGN	30.0	7/30/75	9/11/76	39.7	200.0	
10360	FLIGHT MODIFICATION TO GUN DESIGN	12.0	0/8/76	0/15/76	39.7	295.2	
10370	FLIGHT MODIFICATION TO GUN DESIGN	20.0	7/8/76	0/23/77	39.7	317.0	
10380	FLIGHT MODIFICATION TO GUN DESIGN	0.0	0/7/76	0/23/77	39.7	343.0	
10390	FLIGHT MODIFICATION TO GUN DESIGN	20.0	1/22/73	0/20/77	39.7	343.0	
10400	FLIGHT MODIFICATION TO GUN DESIGN	20.0	1/22/73	0/20/77	39.7	343.0	

**UNCLASSIFIED**

0141651-500

REPORTING ORGN.      PER/TIME      CONTRACT NO.  
 31                      3.1

TERM- 1AN 10 YEAR CAL  
REPORT DATE- 10/11/69  
RELEASE DATE-10/11/69

[illegible]

WEEK	DATE	SUCS.	ACTIVITY DESCRIPTION	ACTV.	DATE	DATE	COMP/	SLACK	REMAINING
NO.				TIME	EXPECTED	ALLOWED	SCHED		TIME
10750	10750	10750	FOSS PMA TESTS	21.0	3/27/76	2/ 6/75		43.7	227.0
10760	10760	10760	--CJ44V--	0.0	3/27/76	2/ 6/75		13.7	227.0
10770	10770	10770	CONJUTR MICR TESTS	159.2	4/ 1/76	4/25/77		49.3	336.0
10780	10780	10780	--CJ44V--	0.0	5/ 6/76	4/28/77		9.3	336.0
10790	10790	10790	--DJ44V--	0.0	5/13/76	6/ 4/75		11.5	174.2
10800	10800	10800	PREPARE VENDOR CONTRACT	1.0	4/25/76	7/17/73		11.5	181.2
10810	10810	10810	FINAL CONTRACT NEGOTIATIONS	1.0	5/ 1/73	7/26/73		11.5	181.2
10820	10820	10820	REMARK INSTALLATION DRAWINGS	15.0	7/ 1/73	7/26/73		11.5	181.2
10830	10830	10830	MANUFACTURE & TEST COMPONENTS	50.0	6/26/76	3/16/76		11.5	239.0
10840	10840	10840	--CJ44V--	0.0	1/21/76	1/17/77		137.3	246.0
10850	10850	10850	MANUFACTURE & TEST COMPONENTS	11.2	6/ 9/76	4/23/77		137.3	246.0
10860	10860	10860	--CJ44V--	1.0	6/ 9/76	4/23/77		11.5	246.0
10870	10870	10870	INSTALL COMPONENTS	0.0	6/27/76	11/19/76		11.5	246.0
10880	10880	10880	--CJ44V--	0.0	1/ 8/73	7/31/73		11.5	182.2
10890	10890	10890	DESIGN FINAL DESIGN LOADS	35.2	3/18/76	5/10/76		15.9	217.4
10900	10900	10900	--DJ44V--	0.0	5/16/76	5/19/76		15.9	217.4
10910	10910	10910	VIBRATION & ACOUSTIC ANALYSIS	15.0	5/26/76	4/23/77		11.5	252.2
10920	10920	10920	--CJ44V--	0.0	9/26/76	8/23/77		11.5	252.2
10930	10930	10930	PREPARE GUN INSTALLATION DRAWINGS	43.0	6/26/76	8/16/76		11.7	257.9
10940	10940	10940	GUN CRUISING CHECKS	32.2	1/ 26/76	1/23/75		12.4	258.6
10950	10950	10950	SYSTEMS INTEGRATION & TESTING	35.2	11/ 7/76	2/ 6/75		12.4	258.6
10960	10960	10960	ACQUISITION TESTS	2.2	6/13/73	11/ 7/73		25.1	258.6
10970	10970	10970	--CJ44V--	0.0	11/ 7/76	2/ 6/75		25.1	258.6
10980	10980	10980	ENVIRONMENTAL FSD DATA	16.2	7/ 8/76	1/16/75		26.1	297.0
10990	10990	10990	PREPARE LONG LEAD ORDER #1	13.0	3/11/76	9/ 9/75		11.3	226.2
11000	11000	11000	CONTRACT AMTITRADING & PLANNING	0.0	3/23/76	7/15/76		11.3	230.0
11010	11010	11010	CONTRACT AMTITRADING & PLANNING	26.2	1/15/76	1/ 7/75		11.3	255.0
11020	11020	11020	CONTRACT AMTITRADING & PLANNING	6.4	3/15/76	2/ 6/75		11.3	259.4
11030	11030	11030	SYSTEMS GUN INTERFERENCE DATA	11.0	7/23/76	4/16/75		07.5	191.0
11040	11040	11040	ACQUISITION ANALYSIS	25.2	1/18/73	9/ 9/75		07.5	211.2
11050	11050	11050	MUNICIPAL AREA ANALYSIS	12.2	1/18/73	1/17/75		07.5	265.4
11060	11060	11060	DETERMINE FINAL GUN INTERFERENCE DATA	36.4	7/ 4/76	6/23/77		07.5	295.0
11070	11070	11070	--CJ44V--	0.0	6/ 4/75	4/24/77		07.5	295.0
11080	11080	11080	POWELL DESIGN OF FORMAL MAINT TRAIN VIB	13.0	7/ 7/75	4/ 2/75		07.9	192.0
11090	11090	11090	FINAL 4TH DESIGN	22.0	1/18/73	9/ 8/75		07.9	212.0
11100	11100	11100	FINAL 4TH DESIGN DETAILS	17.0	4/15/76	1/ 9/76		07.9	229.0
11110	11110	11110	SYSTEMS PLANNING & DESIGN REVIEW	11.0	7/ 2/76	3/26/76		07.9	240.0
11120	11120	11120	MTS CONSTRUCTION	10.2	6/27/76	3/10/77		07.9	290.

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UNCLASSIFIED

PERF/TIME  
ACTIVITY REPORT  
REPORTING ORGN.  
ACT/VLS  
CONTRACT NO.  
801

TERM- IAN 18 YEAR CAL  
REPORT DATE- 10/10/99  
RELEASE DATE- 10/10/99

INTEGRATED ACQUISITION NETWORK  
1ST SORT KEY PREFECSOR CMNT NO.  
2ND SORT KEY SCHEDULE EVENT NO.  
3RD SORT KEY LEAD SLACK  
4TH SORT KEY EXPECTED DATE (YR)

PREC.	SUC.	ACTIVITY DESCRIPTION	PROG.	TIME	EMERGED	DATE	ALLOWED	DATE	COMP/	SCHED	SLACK	REMAINING	ORIG.
11000	11070	MIS FINAL D-TAILING & DELIVERY	1.0	1/31/78	4/20/77						87.9	295.4	
11000	11080	--CUMV--	1.0	7/31/78	8/13/76						11.9	234.8	
11000	11090	MANUFACTURING & DELIVER AVIONICS	1.0	7/31/78	8/13/76						11.9	234.8	
11000	11100	INSTAL. AVIONICS	1.2	7/23/78	1/13/76						21.3	248.8	
11000	11110	PRODUCTION SUN FABRICATION	1.0	1/23/78	5/1/76						21.3	210.6	
11000	11120	FINALIZE SUN DESIGN	1.0	7/23/78	2/27/76						21.3	252.4	
11000	11130	TEST & QUALITY CUM	1.0	7/23/78	7/31/76						21.3	274.8	
11000	11140	--CUMV--	1.0	7/23/78	7/31/76						21.3	274.8	
11000	11150	CONSTRUCTING SUN PRODUCTION & DELIVERY	1.0	1/7/77	12/1/77						21.3	394.8	
11000	11160	FINALIZE ENGINE DESIGN	1.2	6/25/73	3/23/76						37.9	184.8	
11000	11170	ENGINE QUALIFICATION TESTING	1.0	7/23/78	8/13/76						37.9	227.4	
11000	11180	PRODUCTION ENGINE FABRICATION	1.0	6/23/78	7/23/76						37.9	249.8	
11000	11190	ENGINE QUALIFICATION TESTING	1.0	1/23/78	7/31/76						38.9	256.4	
11000	11200	PRODUCTION ENGINE TESTING	1.0	1/7/78	7/31/76						37.9	257.8	
11000	11210	--CUMV--	1.0	1/7/78	7/31/76						37.9	257.8	
11000	11220	CONTINUING ENGINE PRODUCTION & DELIVERY	1.0	3/11/77	12/1/77						37.9	377.8	
11000	11230	SATIFICATION OF DSAPC RECOMMENDATIONS	1.2	3/1/76	2/1/76						26.1	244.8	
11000	11240	AVIONICS LONG LEAD ORDER	1.0	1/7/78	5/1/76						26.1	257.8	
11000	11250	FABRICATION OF DSAPC RECOMMENDATIONS	1.0	7/23/78	8/27/76						26.1	324.8	
11000	11260	PREPARE LONG LEAD ORDER 02	1.0	7/23/78	2/1/76						26.1	295.4	
11000	11270	--CUMV--	1.0	7/23/78	2/1/76						26.1	295.4	
11000	11280	PREPARE COST VERIFICATION	1.0	6/23/78	3/1/76						26.1	297.8	
11000	11290	REVIEW OF TEST DATA	1.0	2/12/78	3/1/76						26.1	322.4	
11000	11300	REVIEW OF TEST DATA	1.0	1/23/78	6/13/76						27.9	308.2	
11000	11310	REVIEW OF TEST DATA	1.0	1/23/78	6/13/76						27.9	312.6	
11000	11320	PREPARATION FOR DSAPC REVIEW	1.0	1/23/78	6/13/76						27.9	320.6	
11000	11330	VOICE	1.0	1/23/78	6/23/77						21.9	352.4	
11000	11340	INITIAL OPERATIONAL CAPRE TRAINING & QA	1.0	1/7/77	12/1/77						21.9	352.4	
11000	11350	VOICE	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11360	VOICE	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11370	VOICE	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11380	CONTINUING AIRCRAFT PRODUCTION	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11390	--CUMV--	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11400	SATUR ACTION TO MEET LOC (PRECEDENCE 1)	1.0	1/7/78	6/23/76						21.9	352.4	
11000	11410	FINAL OPERATION & COORDINATION	1.0	1/7/78	6/23/76						21.9	352.4	

UNCLASSIFIED

PERMIT/TIME

MILITARY REPORT

REPORTING ORGN.

APRIL/83

CONTRACT NO.

001

TERM 10 YEAR CAL  
REPORT DATE- 10/10/69

INTEGRATED ACQUISITION NETWORK  
LEVEL/SUMMARY ITEM 2/

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	ACTUAL DATE	SLACK
300	FACILITY SURVEY COMPLETE	3	9/1/73	7/12/73	-7.7
400	BASE FB RECEIVED FACILITY CONSTR	4	7/21/72	7/21/72	42.7
500	FALL RECEIVED FROM HQ MCON	5	6/15/72	6/15/72	42.7
600	INITIAL DD FORM 1331 RECEIVED BY MAJCOM	6	10/6/72	6/15/73	42.7
700	INITIAL PROGRAM RECEIVED BY HQ USAF	7	12/26/72	1/29/73	42.7
800	APPRECIATION PROJECT BOOK COMPLETED	8	2/12/76	12/10/73	-7.7
900	APPRECIATION PROJECT BOOK COMPLETED	9	2/12/76	12/10/73	-7.7
1000	FULL FB RECEIVED COMPLETE	10	2/12/76	12/10/73	-7.7
1100	FULL FB RECEIVED COMPLETE	11	2/12/76	12/10/73	-7.7
1200	APPRECIATION PROJECT BOOK COMPLETED	12	2/12/76	12/10/73	-7.7
1300	DI 15:00 BY HQ USAF	13	2/26/74	2/26/74	-3.1
1400	FULL FB RECEIVED COMPLETE	14	3/20/74	2/26/74	-3.1
1500	FULL FB RECEIVED COMPLETE	15	3/23/74	7/1/74	-7.7
1600	FULL FB RECEIVED COMPLETE	16	3/23/74	7/1/74	-7.7
1700	HQ FB RECEIVED COMPLETE	17	3/23/74	7/1/74	-7.7
1800	HQ FB RECEIVED COMPLETE	18	3/23/74	7/1/74	-7.7
1900	HQ FB RECEIVED COMPLETE	19	3/23/74	7/1/74	-7.7
2000	CLASS SS PASSED HQ STILL	20	3/23/74	7/1/74	-7.7
2100	CLASS SS PASSED HQ STILL	21	3/23/74	7/1/74	-7.7
2200	CLASS SS PASSED HQ STILL	22	3/23/74	7/1/74	-7.7
2300	FUND APPLICATION BY HQ	23	12/1/73	12/1/73	0.0
2400	FUND APPLICATION BY HQ	24	12/1/73	12/1/73	0.0
2500	FUND APPLICATION BY HQ	25	12/1/73	12/1/73	0.0
2600	FUND APPLICATION BY HQ	26	12/1/73	12/1/73	0.0
2700	FUND APPLICATION BY HQ	27	12/1/73	12/1/73	0.0
2800	FUND APPLICATION BY HQ	28	12/1/73	12/1/73	0.0
2900	FUND APPLICATION BY HQ	29	12/1/73	12/1/73	0.0
3000	FUND APPLICATION BY HQ	30	12/1/73	12/1/73	0.0
3100	FUND APPLICATION BY HQ	31	12/1/73	12/1/73	0.0
3200	FUND APPLICATION BY HQ	32	12/1/73	12/1/73	0.0
3300	FUND APPLICATION BY HQ	33	12/1/73	12/1/73	0.0
3400	FUND APPLICATION BY HQ	34	12/1/73	12/1/73	0.0
3500	FUND APPLICATION BY HQ	35	12/1/73	12/1/73	0.0
3600	FUND APPLICATION BY HQ	36	12/1/73	12/1/73	0.0
3700	FUND APPLICATION BY HQ	37	12/1/73	12/1/73	0.0
3800	FUND APPLICATION BY HQ	38	12/1/73	12/1/73	0.0
3900	FUND APPLICATION BY HQ	39	12/1/73	12/1/73	0.0
4000	FUND APPLICATION BY HQ	40	12/1/73	12/1/73	0.0
4100	FUND APPLICATION BY HQ	41	12/1/73	12/1/73	0.0
4200	FUND APPLICATION BY HQ	42	12/1/73	12/1/73	0.0
4300	FUND APPLICATION BY HQ	43	12/1/73	12/1/73	0.0
4400	FUND APPLICATION BY HQ	44	12/1/73	12/1/73	0.0
4500	FUND APPLICATION BY HQ	45	12/1/73	12/1/73	0.0
4600	FUND APPLICATION BY HQ	46	12/1/73	12/1/73	0.0
4700	FUND APPLICATION BY HQ	47	12/1/73	12/1/73	0.0

UNCLASSIFIED

UNCLASSIFIED

PERFORMANCE

REPORTING ORGN.

CONTRACT NO.

001

TERM 12M 10 YEAR CAL  
REPORT DATE- 10/10/69

INTEGRATED ACQUISITION NETWORK

LEVEL/SUMMARY ITEM 2/

RELEASE DATE: 11/10/69

LATEST

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CALCULATED TL BEFORE START OF 10YR CALANDAR

10100 SSA PRESENTS TO COMPETITIVE PROTO STRAT

10110 FIVE-10 DRAFT OF 10YR CALANDAR

10120 DRAFT REVIEW COMPLETE

10130 FINAL DCP 22A COMPLETE

10140 GCP 21A APPROVED BY ADJUTANT SECDEF

10150 PRO 1-5000

10160 A-10 SPO FULLY ESTABLISHED

10170 RFP ISSUED TO INDUSTRY

10180 DISC-15F TO 400 WRIGHT

10190 SSAC RECOMMENDATIONS PRIORIFIED TO SSA

10200 RFP FOR CON ISSUED TO INDUSTRY

10210 SSAC I

10220 CONTRACTORS SELECTED FOR CON PROTOTYPE

10230 AUTHORIZATION TO AWARD CONTRACT

10240 PROTOTYPE'S DESIGNATION A-9 A-10

10250 CON PROTOTYPING CONTRACTORS SELECTED

10260 A-9 ENGINE CONTRACT NEGOTIATED

10270 A-10 FIRST FLIGHT

10280 A-9 FIRST FLIGHT

10290 A-9 FIRST FLIGHT

10300 A-9 FIRST FLIGHT

10310 A-9 FIRST FLIGHT

10320 A-9 FIRST FLIGHT

10330 A-9 FIRST FLIGHT

10340 A-9 FIRST FLIGHT

10350 A-9 FIRST FLIGHT

10360 A-9 FIRST FLIGHT

10370 A-9 FIRST FLIGHT

10380 A-9 FIRST FLIGHT

10390 A-9 FIRST FLIGHT

10400 A-9 FIRST FLIGHT

10410 A-9 FIRST FLIGHT

10420 A-9 FIRST FLIGHT

10430 A-9 FIRST FLIGHT

10440 A-9 FIRST FLIGHT

10450 A-9 FIRST FLIGHT

10460 A-9 FIRST FLIGHT

10470 A-9 FIRST FLIGHT

10480 A-9 FIRST FLIGHT

10490 A-9 FIRST FLIGHT

10500 A-9 FIRST FLIGHT

10510 A-9 FIRST FLIGHT

10520 A-9 FIRST FLIGHT

10530 A-9 FIRST FLIGHT

UNCLASSIFIED

UIC-ASSIGNED  
PIR/ATIME  
MILESTONE REPORT  
REPORTING ORGN.  
APIT/LS  
INTEGRATED ACQUISITION NETWORK  
LEVEL/SUMMARY ITEM 2/

CONTRACT NO.  
861

TERM 1AN 10 YEAR CAL  
REPORT DATE- 10/18/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	RELEASE DATE, 10/18/69	EXPECTED DATE	ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10370	PROPO-AL INSTRUCTIONS FOR PSD RELEASED	128	7/14/72	6/13/72				-4.5
10380	START AIR FORCE FLAYOFF	129	10/19/72	8/26/72				-7.7
10390	FLAYOFF COMPLETE	130	12/7/72	1/13/72				-7.7
10400	OSAC IT	131	1/19/73	1/19/72				-7.7
10410	A-1 SELECTED FOR PSD	132	1/22/73	1/22/72				-7.7
10420	CONTRACT AWARDED FOR PSD	133	3/5/73	1/17/73				-7.7
10430	ENGINE CONTRACT AWARDED TO GE	134	3/5/73	1/29/73				-7.7
10440	GUN COMPETITIVE SHOOT-OFF BEGINS	135	12/22/72	7/24/72				-7.7
10450	GUN COMPETITIVE SHOOT-OFF ENDS	136	4/2/73	2/31/73				-7.7
10460	GE SELECTED FOR GUN PSD	137	5/4/73	11/9/73				-7.7
10470	CONTRACT AWARDED TO GE FOR GUN	138	5/11/73	11/12/73				-7.7
10480	DESIGN LAYOUTS COMPLETE	139	5/17/73	7/31/73				-7.7
10490	MAJOR FORGING RELEASE	140	5/17/73	7/31/73				-7.7
10500	DESIGN COMPLETE	141	7/17/73	1/4/73				-7.7
10510	DESIGN FORGING	142	10/10/73	2/16/74				-7.7
10520	RELEASE STRUCTURAL DRAWINGS	143	2/21/74	7/10/74				-7.7
10530	STRUCTURAL ASSEMBLY MANUFACTURE	144	7/13/74	9/4/74				-7.7
10540	TOOL PLANNING, DESIGN & MANUFACTURE COMP	145	7/13/74	1/4/73				-7.7
10550	MANUFACTURING DETAILS COMPLETE	146	9/16/73	11/6/73				-7.7
10560	STRUCTURAL ASSEMBLY COMP	147	1/23/74	3/16/74				-7.7
10570	FINAL ASSEMBLY A/C #1 COMPLETE	148	9/27/74	11/19/74				-7.7
10580	GROUND TEST COMPLETE	149	12/2/74	1/23/75				-7.7
10590	FIRST FLIGHT A/C #1 (PREPROD)	150	12/16/74	2/6/75				-7.7
10600	FLIGHT A/C #1 (PREPROD)	151	1/16/75	12/9/75				-7.7
10610	START DYE TESTING	152	2/13/75	4/17/75				-7.7
10620	COMPLETE DYE TESTING	153	2/16/77	4/22/77				-7.7
10630	STORE SEPARATION TEST COMPLETE	154	10/29/73	6/15/74				-7.7
10640	COMPLETE FLUTED TESTS	155	6/18/74	2/4/75				-7.7
10650	STATIC ARTICLE TEST COMPLETE	156	7/1/75	6/26/77				-7.7
10660	FATIGUE ARTICLE TEST PLANNING COMP	157	9/7/75	6/21/76				-7.7
10670	FINAL ASSEMBLY COMPLETE	158	11/21/74	9/4/75				-7.7
10680	LIFE-TIME FATIGUE TESTING COMP	159	7/30/75	5/11/76				-7.7
10690	2 LIFE-TIME FATIGUE TESTING COMP	160	1/9/76	10/15/76				-7.7
10700	4 LIFE-TIME FATIGUE TESTING COMP	161	7/9/76	4/29/77				-7.7
10710	GRESS STRUCTURAL TESTS COMP	162	10/22/73	8/29/74				-7.7
10720	GRESS TESTS DESIGN MODS COMP	163	6/16/73	2/26/74				-7.7
10730	GRESS TRACK TESTS COMP	164	3/27/74	2/6/75				-7.7
10740	GRESS TEST PLANNING COMP	165	3/19/73	3/8/74				-7.7
10750	GRESS TESTS COMPLETE	166	5/4/75	6/29/77				-7.7

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## INTEGRATE

EVENT NO.	EVENT DESCRIPTION	MILESTON CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10770	RELEASE VEHICLE TOCS	109	3/13/73	3/ 6/73		11-9	
10780	ISSUE REP	170	3/13/73	3/ 6/73		11-9	
10790	SILENT WINDOZ	171	3/24/73	7/17/73		11-8	
10800	ISSUE PURCHASE ORDER	172	3/ 1/73	7/24/73		20-7	
10810	RELEASE INSTALLATION DRAWINGS	173	3/21/73	10/17/73		20-7	
10820	QUALIFICATION TESTS COMPLETE	174	3/ 9/73	6/23/77		117-3	
10830	RELEASE COMPONENTS	175	3/24/73	9/18/73		11-5	
10840	PRELIM DESIGN LISTS & CRITERIA SET	176	3/ 8/73	7/31/73		11-5	
10850	FINAL DESIGN, LISTS & CRITERIA SET	177	3/24/73	5/15/74		13-9	
10860	VIBRATION & ACUSTIC ANALYSIS COMPLETE	178	3/24/73	7/21/77		131-1	
10870	GUN LOCATION PREP	179	7/13/73	1/ 5/73		11-7	
10880	GUN INSTALLATION DRAWING COMPLETE	180	3/21/73	8/14/74		11-7	
10890	AVIATION LONG LEAD JONES RELEASED	181	7/27/73	3/23/73		12-1	
10900	AVIATION INSPECTION & TESTING COMPLETE	182	11/ 7/74	2/ 6/75		12-1	
10910	DESIGN TO COST 3RD COMPLETE	183	3/27/73	1 / 1/74		26-1	
10920	DDP	184	12/18/73	3/11/74		11-1	
10930	DIA	185	3/23/74	6/11/74		11-3	
10940	CDR	186	3/23/74	7/15/74		11-3	
10950	SAFETY INSPECTION	187	10/16/73	1/ 7/75		87-5	
10960	SPEED UPDATE	188	3/ 7/73	3/29/75		87-5	
10970	PRELIM GUN INTERFERENCE DATA COMP	189	7/25/73	3/26/75		87-5	
10980	ANALYSIS COMPLETE	190	12/18/73	9/ 9/75		87-5	
10990	VOLUME PRELIM ANALYSIS	191	12/30/74	9/15/76		87-5	
11000	FINAL GUN INTERFERENCE SPEC	192	8/ 4/73	3/22/77		87-5	
11010	TRAINING PLANS COMPLETE	193	3/ 5/73	12/31/74		87-9	
11020	GENERAL MTS DESIGN	194	7/ 9/73	4/ 2/75		87-9	
11030	MTS DESIGN PREP	195	12/13/73	5/ 8/75		87-9	
11040	MTS DRR	196	6/15/74	1/ 9/76		87-9	
11050	MTS CDR	197	7/ 2/74	3/26/76		87-9	
11060	MTS PGAFCA	198	6/27/75	2/18/77		87-9	
11070	DELIVERY OF MTS	199	7/31/75	6/30/77		87-9	
11080	CPAE ORDERED	200	3/13/73	11/ 2/73		11-9	
11090	CPAE RECEIVED	201	3/21/74	7/15/74		11-9	
11100	GUN PDR	202	3/ 8/73	1/11/74		11-9	
11110	RECEIVE PHASE I GUN	203	11/29/73	5/ 1/74		21-3	
11120	GUN CDR	204	3/25/74	2/27/75		21-3	
11130	GUN QUAL TESTS COMPLETE	205	2/20/75	7/31/75		21-3	
11140	ENGINE HARDWARE DESIGN COMP	206	4/ 5/73	1/ 3/75		37-9	
11150	ENGINE CDR	207	1/25/73	3/22/74		37-9	
11160	AIDC ENGINE ENR DRAWING TESTS COMP	208	4/ 2/74	12/30/74		37-5	

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INTEGRATED ACQUISITION NETWORK  
 LEVEL/SUMMARY ITEM 2/

REPORTING ORG.  
 AFIT/LS

VERITIME  
 MILESTONE REPORT

CONTRACT NO.  
 881

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PAGE 1

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 REPORT DATE- 10/18/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	ALLUNABLE DATE	LATEST DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
11170	ALING QUAL TESTS COM	2-9	7/23/76	4/25/75				37.5
11180	PICFIF ENGINE 41	211	8/30/76	5/28/75				37.5
11190	MOT APPROVAL	211	11/ 1/76	7/31/75				37.5
11200	U-4C IITA	212	7/ 8/76	1/14/75				26.1
11210	AUTHORIZATION FOR INITIAL PRODUCTION	213	7/23/76	2/ 9/75				26.1
11215	U-4C IITA	214	2/12/76	8/13/76				26.1
11220	LONG LEAD ITEMS OPT 1 FUNDING POINT	215	11/ 1/76	5/ 9/75				26.1
11230	LONG LEAD ITEMS OPT 2 FUNDING POINT	216	7/31/75	2/ 8/76				26.1
11240	DESIGN TO COST 1F43	217	8/27/75	3/ 1/76				26.1
11250	PCA	218	10/31/75	5/19/76				27.9
11270	PCIE PROGRAM START	219	12/ 3/75	8/18/76				27.9
11280	FOIIE PRODUCTION EXP (CHASE 1)	220	4/ 2/76	8/27/76				23.9
11290	1ST PRODUCTION A/C DELIVERY	221	2/16/77	1/28/77				8.9
11300	OPERATIONAL UNIT TOC	222	10/20/75	12/19/75				7.1
11310	SATAP ACTIVATED	223	12/ 8/77	12/ 8/77				0.0
20640	COMPLETE WIND TUNNEL TESTS	224	4/29/77	6/21/77				7.1
		225	5/23/78	3/13/76				40.5

INC. ASSIGNED

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